G. Harold Antrim Elementary School School Travel Plan



Point Pleasant Beach, NJ

July 2018 Updated September 2021

Prepared By:







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Introduction

Note about this travel plan: The Antrim Elementary School travel plan was first written in 2018, with a walking audit conducted in July of that year. In February 2020 Point Pleasant Beach borough staff and an elected official met with Greater Mercer Transportation Management Association and discussed their needs for walking and biking safety improvements in additional areas, not previously covered in the 2018 version of the travel plan. In March 2020 new travel tallies were conducted by Antrim Elementary School. In April 2021 a second walk audit was conducted in the areas cited by Point Pleasant Beach staff and officials and GMTMA. This 2018-2021 school travel plan includes recommendations from both walk audits, both sets of travel tallies, as well as updates to demographics and school policies.

The Borough of Point Pleasant Beach is located in Ocean County, New Jersey and covers an area that reaches 1.8 miles north to south, and almost one mile east to west; approximately 1.74 square miles. To the south is Bay Head, and to the west is the Borough of Point Pleasant. Point Pleasant Beach is bordered to the east by the Atlantic Ocean and by the Manasquan River to the north.

Point Pleasant Beach's year-round population was 4,655 according to the 2010 Census. Over 9% of the population live in poverty. During the past 18 months the Borough has experienced an influx of year-round residents due to the changing lifestyles and working from home brought on by the pandemic.

In the summers there are more than 1,000,000 visitors to Point Pleasant Beach.¹The town's mile-long boardwalk draws people from across the tri-state region and further afield. To accommodate the surge in summer visitors, on-street parking is situated throughout the Borough, concentrated in the districts east of the railroad tracks, and there are seasonal changes in traffic flow patterns. As a result of the sizeable increase in drivers from other towns, the Borough has undertaken NJ Street Smart campaigns over several summers.

The main road serving Point Pleasant Beach is State Route 35 that runs north-south as a pair of one-way, two lane roads. The northbound side is also known as Cincinnati Avenue, and the southbound side is known as Richmond Avenue. NJ Transit's North Jersey Coast line runs parallel and to the east of Cincinnati Avenue, and the Point Pleasant Beach station is located at SR-35/Cincinnati Avenue and Arnold Avenue.

Further south, State Route 35 becomes known as Sea Avenue and crosses over the NJ Transit rail tracks. Also intersecting each spur of State Route 35 in the southern part of the borough is State Route 88 which leads west to the Borough of Point Pleasant and Lakewood.

The Point Pleasant Beach School District has two schools: Antrim Elementary School (Kindergarten and pre-Kindergarten through 8th grade) and Point Pleasant Beach High School, that are 0.7 miles walking distance apart. Antrim Elementary School grounds include the district's athletic fields. For their small community the school district does not provide bus transportation, except for students with special needs. Improving the safety of walking and biking to school and around the Antrim school grounds

¹ An Economic Impact Analysis of the Tourism Industry in Point Pleasant beach, New Jersey, prepared by The Institute for Tourism and Recreation Management, 2006.

would provide collateral benefit to the district's high school students who use the athletic fields at Antrim Elementary School.

Greater Mercer Transportation Management Association, a non-profit organization was able to assess the pedestrian and biking facilities over two intervals and to propose improvements to not only increase Antrim's green commutation, but to create a safer walking and biking environment for students.

This document, a school travel plan, identifies background and context about the school, observed traffic hazards, some suggested improvements and an estimated timeline/cost breakdown.

Goals

Using the "Six E's" of Safe Routes to School (Evaluation, Engineering, Education, Encouragement, Enforcement, Equity), Point Pleasant Beach would like to increase the number of bicycle riders and walkers at Antrim Elementary School.

School Description

Antrim Elementary School Description

Antrim School is located at 401 Niblick Street, Point Pleasant Beach, New Jersey 08742.

For the 2019-2020 school year, there were 364 students in grades Pre-K to 8th. The following two tables give a breakdown of the enrollment by grade and typical school day hours.

| Table 1: Number of Students Per Grade (2019 – 2020 School Year) | | | |
|--|--------------------------|--|--|
| Grade | Grade Number of Students | | |
| Pre-K | 18 | | |
| Kindergarten | 35 | | |
| 1 st Grade | 34 | | |
| 2 nd Grade | 26 | | |
| 3 rd Grade | 31 | | |
| 4 th Grade | 46 | | |
| 5 th Grade | 34 | | |
| 6 th Grade | 45 | | |
| 7 th Grade | 45 | | |
| 8 th Grade | 50 | | |
| Total | 364 | | |

| Table 2: Typical School Day Hours | | | | |
|-----------------------------------|------------|----------|--|--|
| Grade | Start Time | End Time | | |
| Pre-K for 3-year-olds | 8:05 AM | 10:30 AM | | |
| Pre-K for 4-year-olds | 12:00 PM | 2:30 PM | | |
| Kindergarten | 8:05 AM | 2:30 PM | | |
| 1st through 8th Grade | 8:05 AM | 2:45 PM | | |

According to the NJ Department of Education 2019-20 School Performance Report:

- At home, nearly 16% of students speak with their families in a language other than English
- 7% of students were English Language learners
- Over 22% were economically disadvantaged
- 24% were students with disabilities

Champions at Antrim runs an after-school care program for grades K-6th, however it is a separate organization from the school district.

Current Safe Routes to School Programming

- 2021 Safe Routes to School Gold Recognition for the Borough of Point Pleasant Beach
- Annual Walk to School events and bike rodeos with Point Pleasant Beach Police
- Summer camps give walk & bike safety instruction

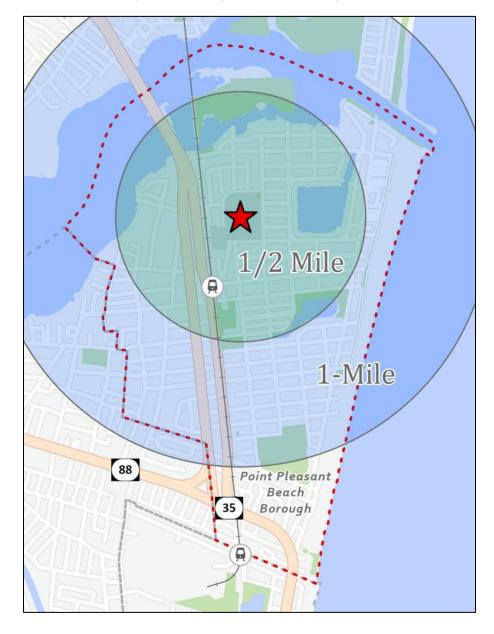
Working Groups and Partnerships

| Organization-2021 | Role/Responsibility | Contact |
|--------------------------------------|--------------------------|---|
| Voorhees Transportation Center | Key Partner | Sean Meehan |
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| Greater Mercer Transportation | Key Partner | Lisa Serieyssol |
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| Point Pleasant Beach Municipal | Key Partner | Arlene Testa |
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| Point Pleasant Beach School District | Key Partner | Dr. Brian Savage |
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| Antrim Elementary School SRTS | Key Partner | Tara Weber |
| Champion | | Principal, Antrim Elementary School |
| D. L. Division I Come | C | webert@ptbeach.com |
| Point Pleasant Beach SRTS | Community Partner | Kelsey Howard |
| Champion | | Colliers Engineering-Municipal Services |
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Supporting Organizations

- Point Pleasant Beach School District
- Borough of Point Pleasant Beach
- Point Pleasant Beach Police Department
- Colliers Engineering & Design, Red Bank, NJ
- St. Peter's Elementary School

Existing Conditions



Map 1: Location of Antrim Elementary School

G. Harold Antrim School is located at 401 Niblick Street, Point Pleasant Beach, New Jersey 08742. Its school grounds extend to Chicago Avenue and Yale Avenue to include the district's athletic fields. Antrim School is a half-mile to the Point Pleasant Beach Boardwalk and Jenkinson's Aquarium, as well as the beaches. Within a half-mile walk are Green Acres Park, Pleasure Park, Lake Louise, and Little Silver Lake. Antrim School, St. Peter's School and Point Pleasant Beach High School are within a 1,200-foot radius, and a combined enrollment of over 900 students.

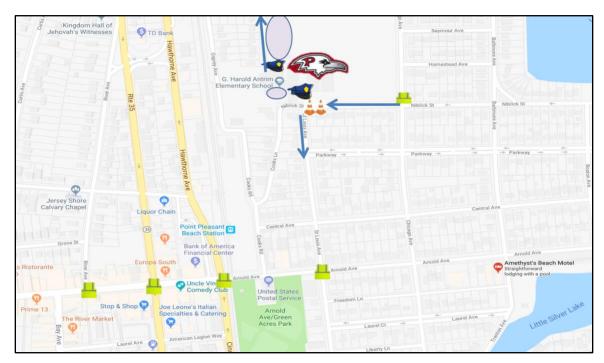
St. Peter's School, a Kindergarten through 8th grade private Catholic school, is located at 415 Atlantic Avenue. Its school grounds extend east to St. Louis Avenue, and north to Forman Avenue. From St.

Peter's School to Antrim School is just over a half-mile walk along St. Louis Avenue. Prior to the 2018 walk audit, Point Pleasant Beach Borough improved safety on Forman Avenue by converting it to one-way directionality, and adding high visibility signing, pavement markings, and arrows. Bollards were also installed to prevent traffic from entering near the entrance to Pleasure Park. These traffic-calming measures are large and visible to drivers.

Arrival/Dismissal/Parking

During arrival and dismissal Point Pleasant Beach Police officers are stationed at each of the school's entrances: Niblick Street and Yale Avenue (Map 2). For drop off and pick-up, drivers are encouraged to go west on Niblick Street, to St. Louis Avenue, where the police officer guides the traffic flow left/south with the added help of traffic cones. Police also place a Do Not Enter sign at Cooks Lane and Niblick Street for arrival and dismissal, to deter students and families from walking or biking on Cooks Lane (see School Policies section below).

Map 2: Location of Crossing Guards and Police (Gull icon= Antrim School, Police hat=Police officer, Vest= Crossing Guard, Arrows=Path of driving, oval=school staff parking area)





Picture 1: Dismissal, Niblick St. & St. Louis Ave

Antrim School staff can park in two areas: Niblick Street & Cooks Lane, or Yale Avenue near the district's Fioretti Field. Chicago Avenue and Yale Avenue have extensive on-street permit parking along the perimeter of the school grounds.

Arnold Avenue, a major east-west thoroughfare in the borough, has four crossing guards stationed in the mornings and afternoons, indicating a high safety interest from the police department.

School Policies

From the 2021-2022 Antrim School Student/Parent Handbook:

WALKING TO AND FROM SCHOOL

- 1. Students must cross major streets only at those crossings where crossing guards are posted.
- 2. Students, who do not live on Cooks Lane, may not walk on Cooks Lane. There is no sidewalk, and it is not safe.
- 3. Students may cross the railroad tracks only at Arnold Avenue and Route 35 or at Atlantic Avenue and Route 35. Crossing guards are posted at these locations.
- 4. Students may not walk on or along the railroad tracks at any time!
- 5. Students must refrain from walking on private property and must walk on sidewalks.
- 6. Students are prohibited from walking in the teachers' parking lots.
- 7. School crossing guards are employed by the Point Pleasant Beach Police to help insure the safety of all children. Students are to obey their instructions at all times. Students reported by a crossing guard for any disobedience or disrespect will be treated as if they disobeyed or gave disrespect to a teacher. This may be in addition to actions taken by Point Pleasant Beach Police.

BICYCLES AND SKATEBOARDS

5514- STUDENT USE OF VEHICLES ON SCHOOL GROUNDS

- 1. Bicycles and Skateboards may be ridden to and from school.
- 2. Bicycles must be in good working order.
- 3. Students under age 17 must wear helmets as required by state law. Students not wearing helmets will be warned. If it is a continuing problem, they will be prohibited from bringing bicycles on school property.
- 4. Bicycles can only be parked at designated bike racks. Students are encouraged to lock their bikes.
- 5. The school assumes no responsibility for damage to or loss of any bicycle or skateboard brought to school.
- 6. Bicycles and skateboards may not be ridden on school property at any time.
- 7. Bicycles and skateboards may not be ridden on Cooks Lane.
- 8. The school reserves the right to withdraw permission for a student to have a bicycle or skateboard on school property if the student operates the bicycle or skateboard in an unsafe manner or fails to wear a helmet.
- 9. There is no secure storage area for skateboards. Students are expected to secure them in their lockers and/or classroom closets as long as there is room.

Travel Tallies

Antrim Elementary School has conducted travel mode tallies on two occasions: June 2018 and March 2020. For each of the travel tallies students were asked "How did you arrive at school today?" and "How do you plan to leave for home after school?" The students then raised their hands and were counted for each travel mode: walk, bike, school bus, carpool, family vehicle, transit, or other. The results for 2018 and 2020 were similar with the exception of biking to school, which saw a noticeable decline in 2020. However, this likely due to the tally being taken in March for 2020 versus June for 2018. The complete data can be found on the following charts:

Figure 1: Antrim Elementary Travel Tallies, June 2018

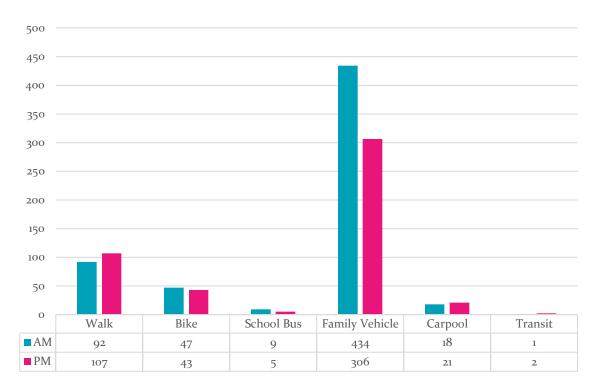
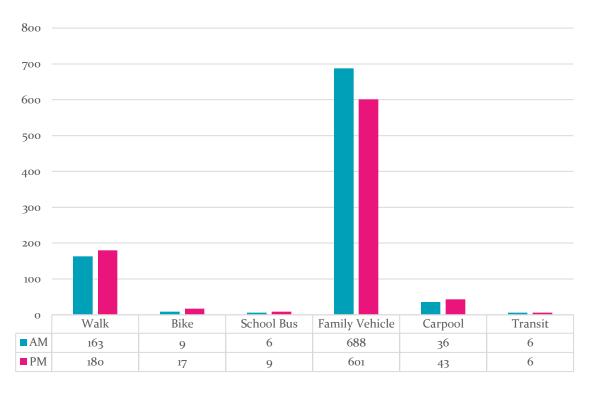


Figure 2: Antrim Elementary Travel Tallies, March 2020



In 2018 and 2020 the family vehicle was used by 70-75% of students as the way to travel to and from school. Walking accounted for 15-20% of students. Carpooling doubled from 2018 to 2020.

In New Jersey, a common criterion for elementary school students to receive school bus transportation is a door-to-door (home to school) distance greater than 2 miles. From Antrim School the farthest distance to a student's home is less than 2 miles. As a result, the school district provides bus transportation only to students with special needs.

Increasing and improving bicycle and pedestrian safety infrastructure in Point Pleasant Beach and reducing traffic hazards would provide families with greater confidence that walking, rolling, and biking to school would be safer.

Walkability Audit #1: July 16, 2018

In order to gather ground-level observations, representatives from Greater Mercer TMA (Jerry Foster, Ian Henderson), T and M Associates (Donna Miller, Gerald Paige), Antrim School (Principal O'Hara), Pt. Pleasant Beach Police (Chief Michigan), and Pt. Beach Town Council (Paul Kanitra) were present for a walkability audit around the school. Photographs taken on the audit are used in the recommendation section found below. The group was able to interview local residents, observe traffic flow and speed, and brainstorm traffic improvements.

The route included a majority of the Antrim School perimeter, north on Chicago Avenue, and across Broadway, a high-speed entrance into Point Pleasant Beach (See Map 3 on next page). This covered the most frequently-traveled intersections.

(35) 7-Eleven 😊 Richard Ave Vista Ln Dunkin' Donuts Princeton Ave Hawthorne Ave G. Harold Antrim Richmond **Elementary School** Point Pleasant Bch Mun Garage Point Pleasant Beach arefoot Real Estat Gloria Nilson & Co. Real Estate

Map 3: Walkability Audit Route

Walkability Audit #2: April 28, 2021

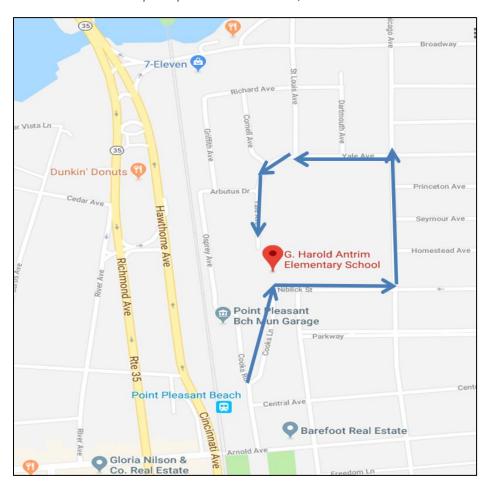
A second walkability audit was conducted on April 28, 2021. Representatives from the Borough of Point Pleasant (Kristen O'Rourke, Det. Derek O'Neill), Colliers Engineering & Design (John Mele P.E.), and Greater Mercer TMA (Lisa Serieyssol and Steven daCosta) participated in the audit. The audit was conducted in two locations:

Location 1: Perimeter of the Antrim School grounds at dismissal

Location 1 of the walk audit began on Cooks Lane heading north to Antrim's main entrance on Niblick Street, where grades K-5th were being dismissed. The audit route then followed the perimeter of the Antrim School grounds: east along Niblick Street, left/north on Chicago Avenue, left/west on Yale Avenue to the cul-de-sac and second entrance to Antrim School used by 6th-8th grades. The audit continued through the Antrim School playground, to return to the school's entrance on Niblick Street (See Map 4).

Location 2: Sea Avenue/SR-35 from the NJ Transit train tracks to Maryland Avenue

The second audit location was one mile south of Antrim School along Sea Avenue/State Route 35, from the junction with State Route 88 where a McDonald's is located to Maryland Avenue near the borough limit. There are several multi-family housing complexes in the area that include affordable housing units, as well as single family homes, all of which are located within the Point Pleasant Beach School District (See Map 5).



Map 4: April 2021 Walk Audit, Location 1

Dunes by the Ocean

McDonald's

Ark Pub & Eatery

Beacon Gardens
Apartments

Sea Alva

Point Pleasant Manor

Ophysical Are

Blue Sky
Business Advisors

Distance Are

Blue Sky
Business Advisors

Map 5: April 2021 Walk Audit, Location 2

Walk/Bike Barriers and Opportunities

State Route 35 divides into southbound (Richmond Avenue) that is posted at 35 mph and northbound (Cincinnati/Hawthorne Avenue) at 40 mph. Further south State Route 35 becomes Sea Avenue with a posted speed limit of 35 mph. Arnold Avenue/County Rd #633, the main east-west artery, is posted at 30 mph, despite being a busy commercial street. Four crossing guards are posted along Arnold Avenue for school arrival and dismissal periods. The northern east-west artery, Broadway/County Rd # 635, has a posted speed of 35 mph, though residents comment that speeding is prevalent (see Map 6 on next page).

More specific comments on conditions and recommendations can be found in Recommended Infrastructure Improvements.

SPEED LIMIT SPEED LIMIT 25 SPEED LIMIT SPEED LIMIT Point Pleasant Beach aurel Co Point Pleasant Beach Borough SPEED LIMIT 35

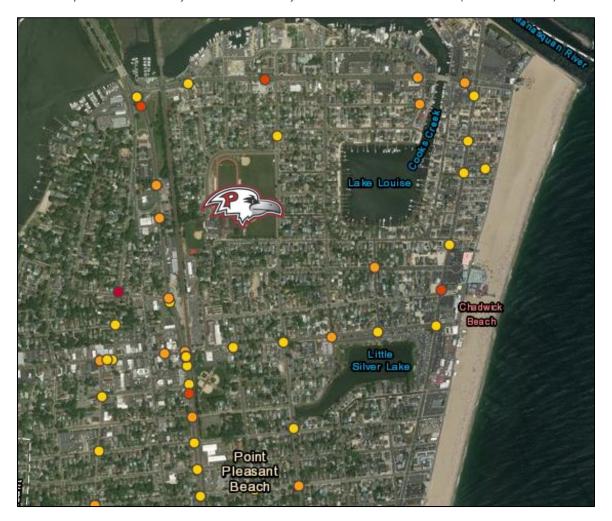
Map 6: Point Pleasant Beach Speed Limits

Safe Routes to School Disabled Student Inclusion

- Maintenance of current ADA-compliant pads and addition of pads to sidewalks to enable access during Walk to School events
- Adjust safety presentation styles for those with ADHD and other learning obstacles
- During schoolwide walk audit events, tailor routes for special needs students
- Train the Trainers approach- Pass along safety education to the aides who have to tailor educational needs based on individual student plans
- Look into funding sources for purchasing specially-tailored bicycles for disabled.

Crash Data

The following map shows pedestrian and pedacyclist crash data for Point Pleasant Beach Borough from 2006 to 2016. Antrim school is denoted by eagle icon.



Map 7: Antrim Vicinity Pedestrian and Cyclist Crash Data 2006-2016 (Source NJDHTS)

A list of Point Pleasant Beach cyclist and pedestrian crashes from 2006-2016 is listed in Appendix A.

Identification of Problem Areas

Please see Maps 3, 4, and 5 for the routes maps of the walk audits conducted in July 2018 and April 2021. There have also been informal walk and bike audits around the school and its neighborhood to identify both infrastructure improvements to assist current walkers, skaters, and bicyclists and places to create new spaces for future walking, rolling, and biking to school.

Parent and administrative input and conversations have provided valuable input in determining priority areas.

Recommended Infrastructure Improvements

*Please note that good examples of current infrastructure are included for reference purposes.

In general:

- Greater Mercer TMA would like to see more students walk or bike to school. This could be achieved through street improvements that increase safety.
- Road and lane widths are wide which encourage speeding; therefore traffic-calming measures should be prioritized.
- Continue to host Walk and Bike to School events and work on Safe Routes to School Recognition

The following pages contain identified issues with each street and infrastructure recommendations.

During the walk audit a number of parking spaces were observed being too close to the intersection. The images below show two instances where car parking space lines are defined close to street corners, reducing visibility for both motorists and pedestrians. Cars too close to crosswalks make it harder for vehicles to spot crossing pedestrians, it could cause peering pedestrians to walk further into intersections, and turning vehicles have a harder time viewing traffic.

NJ Law (emphasis added):

"39A:PKG-3. Places where parking prohibited a. Except when necessary to avoid conflict with other traffic or in compliance with the directions of a traffic or police officer or traffic sign or signal, the operator of a vehicle shall not stand or park the vehicle in any of the following places... (5) Within 25 feet of the nearest crosswalk or side line of a street or intersecting highway, except at alleys;"



Picture 3: Parking spaces too close to corner create pedestrian visibility risk



Picture 2: Parking spaces too close to corner create pedestrian visibility risk

Cooks Lane

Issues/Description:

The Antrim Student/Parent Handbook (see "School Policies" above) instructs students and parents <u>not</u> to use Cooks Lane to go to or from Antrim School due to the narrow roadway, parking on one side, and no sidewalks. However, during the audit parents were observed walking on Cooks Lane, having collected their children Antrim. A short stretch of sidewalk close to Antrim School led to a path into the school's playground, and is accessible year-round. The double yellow center lines and "SLOW SCHOOL" pavement markings were very faded. There was overgrown shrubbery on the east side, close to Niblick Street.

Recommendations:

• The faded double yellow center lines and "SLOW SCHOOL" pavement markings should be refreshed. The overgrown shrubbery should be pruned.



Picture 4: Cooks Lane at dismissal, April 2021

Niblick Street

Issues/Description;

At the Niblick Street entrance, a police officer was stationed for dismissal at the intersection with St. Louis Avenue. Traffic cones and a neon green figure were added to ensure drivers didn't travel further west, and students in the crosswalk were more visible. At dismissal drivers are directed to turn left (south) before the crosswalk at St. Louis Avenue. Younger students were observed meeting their parents and older students were observed walking home in small groups, or riding their bikes and scooters.

Recommendations:

• "SLOW SCHOOL" pavement markings would be helpful on this segment.

Chicago Avenue

Issues/Description:

The intersection of Chicago and Niblick has high visibility ladder crosswalks, and the signage is a reflective yellow-green. Curb cuts are appropriate. "Slow School" is large. While 25mph is marked, a dynamic speed monitoring sign might provide additional traffic calming. Chicago's large width (approximatel 40 feet) presently encourages speeding, and the centerline is a dashed yellow. Members of both audit teams expressed concern about speeding along Chicago Avenue.



Picture 5: High Visibility Crosswalk, Chicago Avenue and Niblick Street 2018, Picture is looking north from Chicago Ave

In the April 2021 walk audit a police officer was observed at this intersection to assist with crossing, as well as a speed detector on a trailer displaying "Speed Limit 25 mph Your Speed xx." Parents and children walked home on sidewalks along Chicago and others rode their bikes on the road.



Picture 6: Chicago Avenue with Officer and Speed Trailer, 2021

Parking is permitted on both sides of Chicago Avenue and is lightly used during the school year, except during the school sports seasons. Sidewalks were added on Chicago Avenue in 2017 that align the perimeter of the school. There were some overgrown trees.



Picture 7: New Sidewalks Added in 2017 Align the Perimeter of Antrim School

Recommendations:

- Several options to help slow traffic along Chicago were discussed—including a road diet, fourway stop, mini-roundabout, pedestrian island on Chicago, bike lane on one side (north or south) of the road, potentially as part of a bike lane loop or "P" with adjacent streets.
- A portable speed display or a pole-mounted speed display could also be added to help slow down drivers. Angled parking would narrow the lanes and increase the number of spaces.
 Street trees would provide shade and provide a pleasing aesthetic.
- Some tree trimming would be helpful for pedestrians.

Yale Avenue

Issues/Descriptions:

Yale Avenue spans the outer perimeter of Antrim's athletic fields. While marked 25mph, the road width is 40 feet, and its curve evokes a "racetrack" feel. Drivers are not necessarily looking for crossing students since there are no "SLOW SCHOOL" pavement markings or signs.



Picture 8: Yale Avenue (Southbound)

Parking is possible on both sides- some by permit in the vicinity of the school and is in high demand during school sports season. At the district's Fioretti Field there was much drop off/pick up and parking activity.

Extensive sidewalks were added in 2017. The crosswalks are somewhat faded. During arrival and dismissal, a police officer is posted near the Yale Avenue crosswalk and cul-de-sac. Students would cross Yale at various locations, though not at the crosswalk. This area can get hectic during the drop-off/pick up, and cars sometimes do not stop for students trying to cross.



Picture 9: Yale Avenue Crosswalk near the cul-de-sac

Recommendations:

- "SLOW SCHOOL" pavement markings and signs would help remind drivers to be aware of students
- In addition to crosswalk lines, high visibility signage and ADA pads would be ideal. In the longer term, perhaps an island, speed humps, or crosswalk bump outs to decrease crossing length, could slow traffic.
- To improve the combination of pedestrian, cyclist, and car circulation in the cul-de-sac near the school entrance, long-time Yale Avenue residents recommended extending the sidewalk from the west side of the street to the school grounds, making a right angle towards the school along the fence, where more bike parking could be installed. A raised crosswalk is another option.



Picture 10: Proposed Location of Yale Avenue Sidewalk Extension

Sea Avenue

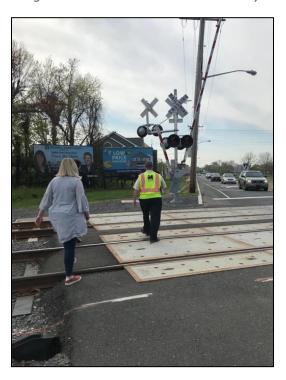
Issues/Descriptions:

Both Point Pleasant Beach Police and Borough staff expressed strong concerns about safety in this area. These concerns are also echoed by residents living in the neighborhoods and apartment complexes south of Sea Avenue. One of the main issues is the lack of a safe way to cross Sea Avenue to get to Antrim School. The only marked crosswalk on Sea Avenue is at the intersection of Sea Avenue and Maryland Avenue, approximately .2 miles away from the most direct route to Antrim School. This means that students living in the apartment complex on the southside have to either cross a dangerous road without a marked crosswalk, or be driven to school.

Another especially dangerous issue on Sea Avenue is the pedestrian walkway that crosses the NJ Transit railroad tracks. It is narrow, with a precipitous drop-off of 8-12 inches, to the aggregate foundation around the rails. To the west of the tracks a 10-foot paved side path is followed by a well-worn dirt path for about 115 feet, leading to Charleston Avenue, Maryland Avenue, W. Cincinnati Street, and Delaware Avenue.



Picture 11: Dangerous NJ Transit Pedestrian Walkway and Dirt Path



Picture 12: NJ Transit Crossing

It is not feasible to install sidewalks on the north side of Sea Avenue, due to its intersections with heavily traveled spurs to Cincinnati Avenue (SR-35 North) and State Route 88 and speed limits of 35-40 mph.

East of the NJ Transit tracks along the south side of Sea Avenue there are discontinuous sidewalks, until nearly Maryland Avenue. There are also no marked crosswalks, except at Maryland Avenue.



Picture 13: Sea Avenue - South Side Looking East

At the intersection of Sea Avenue & East Ocean Ave/County Road 635 there is a signalized intersection, however it also lacks crosswalks. The nearest marked crosswalk is approximately 250 feet further east, at the intersection of Sea Avenue & Maryland Avenue. Despite the marked crosswalk, and pedestrian rapid flashing beacons, cars still did not yield to pedestrians. The crossing distance at Maryland Avenue is approximately 48 feet, and overall the crossing felt unsafe. This crossing could benefit from a pedestrian island. Lastly, another dirt trail along East Ocean Avenue/ County Road 635 was observed.



Picture 14: Marked Crosswalk at Intersection of Sea Avenue and Maryland Avenue

Recommendations:

- Improve grading at NJ Transit level crossing to remove drop-off.
- Expand sidewalks east and west of NJ Transit tracks on southside of Sea Avenue.
- Determine the best location and implement creation of a safe crossing of Sea Avenue near NJ Transit tracks to allow students living in apartment complexes on southside of Sea Avenue to walk or bike to Antrim School (See Engineering Table on page 31 for more information).
- Add crosswalks and pedestrian signals to lighted intersection at Sea Avenue and East Ocean Ave.

Parkway

Parkway has pleasant streetscaping which provides shade and narrows the surrounding lanes. This may contribute to traffic calming. Parking is also clearly and boldly delineated.



Picture 15: Parkway Streetscaping

New sidewalks were noted as installed at the corner so St. Louis Avenue and Parkway in the 2018 audit. The bright ADA pad was properly located at the corner. A marked crosswalk to be added east was recommended in that audit and has since been completed.



Picture 16: St. Louis and Parkway, 2018

Recommendations:

No Changes

St. Louis Avenue

Issues/Descriptions:

St. Louis Avenue is a residential street running north-south from the front entrance of Antrim School on Niblick Street to Carter Avenue, where it changes to East Avenue, leading shortly to Sea Avenue/SR-35. It passes by Green Acres Park, Pleasure Park, St. Peter's Church, St Peter's School, and Lake of the Lillies.

Parallel to Cincinnati Avenue/SR-35 and the NJ Transit tracks, St. Louis Avenue is nearly one mile long and on average is 40 feet wide. Many of its cross streets are dead ends one or two blocks to the west, due to the NJ Transit tracks, making vehicle activity quite light on St. Louis Avenue. Over the ten-year period (2006-2016) there was one crash reported on St. Louis Avenue.

The posted speed limit is 25 mph, and on-street parallel parking is permitted on both sides for most of its length. During the school year the parking is very lightly used. At arrival and dismissal times no vehicles are permitted to travel north on St Louis Avenue from Parkway to Niblick Street.

Recommendations:

• St Louis Avenue, together with East Avenue, would be good candidates to become the borough's first Bike Boulevard, that are typically low-speed, low-volume residential streets.

Broadway/ County Road 635

Issues/Descriptions:

Broadway is a major gateway to the beaches, the adjacent boardwalk, and many area restaurants. Though the posted speed limit is 35 mph, cars appeared to be speeding during the walkability observations in 2018. Interviews with neighbors confirmed speeding behavior.



Picture 17: Broadway (Eastbound)

The Ocean County Road Department has previously installed speed detecting signs on Broadway, however the effect on drivers' speed is unknown. Additionally, at the eastern end where Broadway intersects Ocean Avenue/County Road (also #635) residents have complained about the difficulty of crossing Broadway & Ocean Avenue. That intersection has several elements contributing to potential conflicts: a parking lot with a capacity for 300+ cars, a slip road from Broadway to N. Ocean Avenue that encourages speeding, and an adjacent non-aligned intersection of Broadway with Inlet Drive and Randall Avenue.

Recommendations:

- Conduct speed study to determine extent of speeding and identify best ways to reduce speeds
- Improve/add pedestrian infrastructure to increase safety

Cincinnati/State Route 35 N

Issues/Description:

Cincinnati Avenue's speed limit is marked 40 mph, though Richmond Ave (Route 35 S) that runs parallel is 35 mph. An immediate lowering of the marked speed limit should initiate traffic calming. Cincinnati Avenue is over one mile long though the only marked crosswalks are at Arnold Avenue and at Atlantic Avenue. Antrim School students who live west of State Route 35 have only two places to cross Cincinnati Avenue where there are marked crosswalks and pedestrian signals.



Picture 18: Cincinnati Avenue & Forman Avenue (west of NJ Transit tracks)

Recommendations:

- Lower speed limit to initiate traffic calming
- Add marked crosswalks and pedestrian signals to improve safety across Cincinnati Avenue, for example: at Forman Avenue, Trenton Avenue, New Jersey Avenue
- Add curb cuts and ADA pads where appropriate
- Consider installing HAWK beacon (High-Intensity Activated crosswalk) to provide pedestrian the right of way.

Goals and Actions

This plan of action is intended to increase safety for students on their walk to and from school and when appropriate, encourage more students to walk. The tables below identify those actions, a responsible party for implementing them, a time frame, and a level of cost for five different categories: Engineering, Education, Encouragement, Enforcement, and Evaluation. Many actions identified as "short-term" and "low cost" can make a big difference in a shorter time frame and can be accomplished with the help of local partners. This "low-hanging fruit" can be prioritized for greater impact in a shorter period of time. However, traffic calming measures are key items to address allowing students more time to cross and greater visibility (larger driver field of vision at slow speeds).

Cost estimates are for planning purposes only – a professional engineer should prepare the actual estimates used for grant application. These estimates were prepared using the SRTS Implementation Cost sheet prepared in 2020 by NV5 to support the grant application process.²

² https://www.saferoutesnj.org/wp-content/uploads/2020/08/2020-Design-Treatment-Typical-Costs.pdf

^{*}Installed cost: product and labor

| <u>Engineering</u> | | | | |
|--|--------------------------------------|-----------------|-----------------------|--|
| Action | Responsibility | Time Frame | Cost Estimates* | |
| Yellow paint to extend "No-Parking" Zonesvarious locations | Pt Pleasant Beach | Short Term | \$1.60/sq. ft. | |
| Cooks Lane | | | | |
| Double yellow center lines | Pt Pleasant Beach | Short Term | \$1.60/sq. ft. | |
| "SLOW SCHOOL" pavement markings | Pt Pleasant Beach | Short Term | \$4/sq. ft. | |
| Prune overgrown shrubbery | homeowner | Short Term | \$200 | |
| Niblick Street | | | | |
| "SLOW SCHOOL" pavement markings- thermoplastic | Pt Pleasant Beach | Short Term | \$4/sq. ft. | |
| Bike Racks (each holds 2 bikes) | Pt Pleasant Beach School District | Short Term | \$200-400 | |
| Chicago Avenue | | | | |
| Double yellow center lines | Ocean County | Short Term | \$4/sq. ft. | |
| Bike symbol- thermoplastic, 20 sq ft | Ocean County | Short Term | \$80 each | |
| Shared lane markings, "Sharrows" – 30 sq. ft. | Ocean County | Short Term | \$120 each | |
| Road diet: painted lines w/thermoplastic striping, OR | Ocean County | Medium Term | \$4/sq. ft. | |
| Bike Lane(s) 4" thermoplastic striping, OR | Ocean County | Medium Term | \$1.60/linear foot | |
| Pedestrian islands, OR | Ocean County | Medium Term | \$7,500 each | |
| Mini-roundabout | Ocean County | Medium- term | \$35,000 | |
| Streetscaping trees | Pt Pleasant Beach | Ongoing | \$900 each | |
| Pole-mounted radar speed sign -fixed | Pt Pleasant Beach/Ocean County | Short Term | \$5,000-6,000 | |
| Yale Avenue | | | | |
| "SLOW SCHOOL" pavement markings- thermoplastic | Pt Pleasant Beach | Short Term | \$4/sq. ft. | |
| Crosswalks -Continental Style, thermoplastic | Pt Pleasant Beach | Short Term | \$4/sq. ft. | |
| ADA Pads at crosswalk ramps | Pt Pleasant Beach | Short Term | \$250 each | |

| <u>Engineering</u> | | | | |
|--|--------------------------------------|-----------------|---------------------|--|
| Action | Responsibility | Time Frame | Cost Estimates* | |
| Crosswalk curb extensions, w/ drainage modifications, OR | Pt Pleasant Beach | Medium- term | \$20,000- 80,000 | |
| Raised crosswalk | Pt Pleasant Beach | Medium- term | \$8,200 | |
| Signs for pedestrians and school zone | Pt Pleasant Beach | Short Term | \$50/ sq. ft. | |
| Pedestrian islands | Pt Pleasant Beach | Medium- term | \$7,500 each | |
| Concrete sidewalk extended at cul-de-sac (4" thick X 5' wide) | Pt Pleasant Beach | Medium- term | \$108/ sq. yd. | |
| Yale Avenue: Bike racks (each holds 2) | Pt Pleasant Beach School District | Short Term | \$200-400 | |
| Sea Avenue | | | | |
| Safer grading at NJT level crossing from pedestrian path to rail base | NJ Transit | Short Term | T/B/D | |
| Multi-use path- asphalt 10' X 115' (west of RR tracks) | Pt Pleasant Beach | Medium- term | \$95/ ft. | |
| Multi-use path- asphalt 10' X 460' (east of RR tracks) | Pt Pleasant Beach | Medium- term | \$95/ ft. | |
| Study to determine best location for safe crossing from Sea Garden Condos to north | NJDOT and Ocean County | Short Term | T/B/D | |
| Crosswalks- Continental style, thermoplastic at future safe crossing site from Sea Gardens Condos to north | NJDOT and Ocean County | Short Term | \$4/sq. ft. | |
| HAWK Signal at future safe crossing site from | NJDOT and Ocean | Medium- | \$100,000- | |
| Sea Gardens Condos to north | County | term | 190,000 | |
| Pedestrian crossing signage at future safe crossing site from Sea Gardens Condos to north | NJDOT and Ocean County | Medium- term | \$50/ sq. ft. | |
| Crosswalks- Continental style, thermoplastic at Sea & Ocean Avenues | NJDOT and Ocean County | Medium- term | \$4/sq. ft. | |
| Pedestrian signal heads added at Ocean Ave traffic signal | NJDOT and Ocean County | Medium- term | \$23,200 | |
| Pedestrian island at Maryland Ave | NJDOT | Medium- term | \$7,500 | |
| St. Louis Avenue | | | | |
| Bike Boulevard- signage and pavement markings, or | Pt Pleasant Beach | Short Term | T/B/D | |
| Bike symbol- thermoplastic, 20 sq. ft., or | Pt Pleasant Beach | Short Term | \$80 each | |
| Shared lane markings, "Sharrows" – 30 sq. ft. | Pt Pleasant Beach | Short Term | \$120 each | |

| <u>Engineering</u> | | | | |
|--|---------------------------|-----------------|-----------------------|--|
| Action | Responsibility | Time Frame | Cost Estimates* | |
| Broadway | | | | |
| Conduct speed study | Ocean County | Short Term | T/B/D | |
| Pedestrian islands | Ocean County | Medium- term | 7,500 each | |
| Cincinnati Avenue | | | | |
| Reduce Cincinnati Speed Limit From 40mph to 35mph | NJDOT and Ocean County | Short Term | T/B/D | |
| Crosswalks added- Continental style, thermoplastic | NJDOT and Ocean County | Medium- term | \$4/sq. ft. | |
| Pedestrian signal heads added, or | NJDOT and Ocean County | Medium- term | \$25,000 | |
| HAWK Signal | NJDOT and Ocean County | Medium- term | \$100,000- 190,000 | |
| ADA pads | NJDOT and Ocean County | Medium- term | \$250 each | |
| Curb cuts (5' deep x 15' wide) | NJDOT and Ocean County | Medium- term | \$1,500 each | |

| <u>Education</u> | | | | | |
|---|----------------------------|----------------------|------|--|--|
| Action | Responsibility | Time Frame | Cost | | |
| Educate students, families and school staff to know ways to keep students safe around each drop-off/ pick up zones: Niblick, Yale | School, School District | Short Term / Ongoing | Low | | |
| Increase community outreach about health benefits of walking and biking to school | School, PTO | Short Term | Low | | |
| Conduct community wide outreach about Safe Routes to School actions | School, GMTMA | Short Term/ Ongoing | Low | | |
| Establish programs to encourage students to walk or bike to school, ex: Golden Sneaker Award, Walking Wednesday, Walking School Bus, Bike Train | School, GMTMA | Short Term/ Ongoing | Low | | |
| Educate community and responsible parties about snow removal on sidewalks near schools | Public Works | Short Term/ Ongoing | Low | | |

| <u>Encourage</u> | <u>ment</u> | | |
|---|---|---------------|------|
| Action | Responsibility | Time Frame | Cost |
| Establish main walking routes, safety corridors, walking school buses – safety in numbers | School, PTO, GMTMA, Community Groups | Ongoing | Low |
| Conduct student and parent surveys about actions and rewards that encourage more to walk/bike and feel safer walking/biking to school | School, PTO, GMTMA | Short Term | Low |

| <u>Enforcement</u> | | | | |
|---|----------------|---------------|--------------|--|
| Action | Responsibility | Time Frame | Cost | |
| Enforce speed limits (in general and areas around Antrim school), pedestrians walking safely, drivers watching for pedestrians especially when students are going to/ from school | Police | Ongoing | Low / Medium | |
| Enforce motorist compliance with crossing guard instructions | Police | Ongoing | Low / Medium | |
| Enforce parking laws | Police | Ongoing | Low / Medium | |
| Conduct Street Smart safety enforcement campaigns. | Police | Ongoing | Low / Medium | |

| <u>Evaluation</u> | | | | |
|--|----------------|------------|------|--|
| Action | Responsibility | Time Frame | Cost | |
| Conduct student travel tallies on annual basis | School | Annual | Low | |
| Conduct bikeability audit of walking area | School, GMTMA | Short Term | Low | |

^{*}Explanation of funding- Greater Mercer TMA is funded through the New Jersey Department of Transportation to offer advice and assistance in starting safe Routes to School programs and projects. Greater Mercer TMA can help with walk and bike to school events, walking school bus programs, youth bicycle and pedestrian education, school travel plans, and surveys that provide evaluation and feedback on local programs.

Evaluation

Task Force Timeline

Greater Mercer TMA will be in discussion with participating organizations about implementation progress.

Conclusion

Antrim Elementary School is home to nearly 400 students. Based on the overall area of Point Pleasant Beach Borough, the routes to school for many students are well within 1.5 miles door to door from home to school. This is commonly deemed a suitable distance for elementary students to walk or bike to school. Moreover, due to its small area Point Pleasant Beach School District does not provide school bus transportation except to students with special needs.

The two sets of travel tallies reveal that the overwhelming majority of students travel to and from school in the family car. It is likely that a perception of road safety from parents plays into this decision. With just 20-30% of the students reporting that they traveled to school by walking or biking, there is clear potential for shifting many more students out of vehicles and toward more active transportation.

In the immediate vicinity of Antrim School, along Chicago Avenue and Yale Avenue a variety of road diet techniques and more awareness of the school zone speed limit have been proposed.

To reach the Antrim School by foot or on bike from the western residential neighborhoods requires crossing State Route 35: Richmond Avenue (southbound) and Cincinnati Avenue (northbound), with speed limits of 35-40 mph. We have proposed adding high-visibility crosswalks, pedestrian signal heads or HAWK signals to make crossing safer.

There is no marked crosswalk along Sea Avenue before Maryland Avenue. Residents in the neighborhoods south of Sea Avenue and west of the NJ Transit rail tracks have confirmed this hesitancy to permit their children to ride or walk to school. Moreover, these areas include a considerable number of affordable housing units. The optimal location for crosswalks, pavement markings, pedestrian signal heads and/or HAWK signal should be identified and installed to remedy this need.

Just to the north of Sea Avenue is a quiet residential street, St. Louis Avenue, that provides a direct connection to Antrim School. In conjunction with the installation of safe crosswalks on Sea Avenue, the Borough could consider a Bike Boulevard the length of St. Louis Avenue and East Avenue, to reach Antrim School. It would be similar to the Haven Avenue Bike Boulevard in Ocean City NJ, that has worked successfully since 2008. Signage and pavement symbols, plus education, would be important in establishing this type of bike facility.

Traffic calming and speed reduction throughout the borough should be priorities. Apart from the roads already mentioned, the busy commercial districts of Arnold Avenue/ County Rd 633 and Broadway/County Rd 635, have had much higher incidents of serious crashes. To increase the possibility

of more students and families choosing to walk or bike to school, speed studies and traffic calming measures such as road diets are recommended.

Also, throughout the Borough there is the opportunity to add marked Continental-style crosswalks to increase awareness of pedestrian crossings. Visibility for turning vehicles should be addressed, as several spots were closer than New Jersey minimum distance of 25 ft. distance from the corner.

Finally, regular safety education for students, families, and drivers is important to remind everyone to share the road and follow the rules of the road. Traffic safety improvements are welcome modifications that will not only increase the safety of the neighborhoods surrounding Antrim School, but slower speeds can boost the community feeling in town.

Appendix A: Point Pleasant Beach Borough Pedestrian and Cyclist Crashes from New Jersey Department of Traffic and Highway Safety, 2006-2016

| Crash Year | Severity | Crash Type | Crash Location |
|------------|-----------------------|--------------|------------------|
| 2016 | Moderate Injury | Pedalcyclist | OCEAN COUNTY 633 |
| 2016 | Moderate Injury | Pedalcyclist | NJ 35 |
| 2016 | Incapacitating Injury | Pedestrian | OCEAN COUNTY 635 |
| 2016 | Moderate Injury | Pedestrian | NJ 35 |
| 2016 | Incapacitating Injury | Pedestrian | NJ 35 |
| 2016 | Pain | Pedalcyclist | NJ 35 |
| 2015 | Pain | Pedalcyclist | NJ 35 |
| 2015 | Pain | Pedestrian | NJ 35 |
| 2015 | Pain | | OCEAN COUNTY 633 |
| 2015 | | Pedalcyclist | |
| | Moderate Injury | Pedalcyclist | OCEAN COUNTY 633 |
| 2014 | Pain | Pedalcyclist | NJ 35 |
| 2013 | Moderate Injury | Pedalcyclist | NJ 35 |
| 2013 | Incapacitating Injury | Pedestrian | NJ 35 |
| 2013 | Moderate Injury | Pedalcyclist | NJ 35 |
| 2013 | Moderate Injury | Pedalcyclist | OCEAN COUNTY 635 |
| 2013 | Moderate Injury | Pedalcyclist | NJ 35 |
| 2012 | Moderate Injury | Pedalcyclist | CHICAGO |
| 2012 | Incapacitating Injury | Pedalcyclist | NJ 35 |
| 2012 | Pain | Pedalcyclist | NJ 35 |
| 2012 | Pain | Pedalcyclist | ARNOLD AVE |
| 2011 | Pain | Pedestrian | BROADWAY AVE |
| 2011 | Moderate Injury | Pedalcyclist | OCEAN COUNTY 635 |
| 2010 | Moderate Injury | Pedalcyclist | NJ 35 |
| 2010 | Moderate Injury | Pedalcyclist | NJ 35 |
| 2010 | Moderate Injury | Pedalcyclist | RIVER AVE |
| 2010 | Moderate Injury | Pedalcyclist | NJ 35 |
| 2010 | Moderate Injury | Pedalcyclist | NEW JERSEY AVE |
| 2010 | Moderate Injury | Pedalcyclist | ARNOLD AVE |
| 2010 | Pain | Pedalcyclist | NJ 35 |
| 2009 | Moderate Injury | Pedalcyclist | OCEAN COUNTY 635 |
| 2009 | Moderate Injury | Pedalcyclist | NJ 35 |
| 2009 | Pain | Pedalcyclist | WASHINGTON AVE |
| 2009 | Pain | Pedestrian | PARKWAY AVE |

| Crash Year | Severity | Crash Type | Crash Location |
|------------|-----------------------|--------------|-------------------|
| 2009 | Pain | Pedestrian | RIVERSIDE PLACE |
| 2009 | Pain | Pedalcyclist | NJ 35 |
| 2009 | Moderate Injury | Pedalcyclist | CHICAGO |
| 2008 | Incapacitating Injury | Pedestrian | OCEAN COUNTY 635 |
| 2008 | Moderate Injury | Pedalcyclist | NJ 35 |
| 2008 | Moderate Injury | Pedalcyclist | NJ 35 |
| 2008 | Moderate Injury | Pedalcyclist | OCEAN COUNTY 635 |
| 2008 | Moderate Injury | Pedestrian | OCEAN COUNTY 635 |
| 2008 | Pain | Pedalcyclist | NJ 35 |
| 2008 | Pain | Pedalcyclist | OCEAN COUNTY 633 |
| 2008 | Pain | Pedalcyclist | NJ 35 |
| 2008 | Pain | Pedalcyclist | OCEAN COUNTY 604 |
| 2008 | Moderate Injury | Pedalcyclist | OCEAN COUNTY 604 |
| 2008 | Pain | Pedestrian | OCEAN COUNTY 604 |
| 2007 | Moderate Injury | Pedalcyclist | CHICAGO AVENUE |
| 2007 | Moderate Injury | Pedalcyclist | NJ 35 |
| 2007 | Incapacitating Injury | Pedestrian | NJ 35 |
| 2007 | Moderate Injury | Pedestrian | OCEAN COUNTY 635 |
| 2007 | Moderate Injury | Pedalcyclist | NJ 35 |
| 2007 | Moderate Injury | Pedestrian | OCEAN COUNTY 635 |
| 2007 | Moderate Injury | Pedestrian | DANBY PLACE |
| 2007 | Moderate Injury | Pedalcyclist | OCEAN COUNTY 635 |
| 2007 | Moderate Injury | Pedestrian | OCEAN COUNTY 604 |
| 2006 | Moderate Injury | Pedestrian | OCEAN COUNTY 633 |
| 2006 | Pain | Pedalcyclist | NJ 35 |
| 2006 | Fatal | Pedalcyclist | RIVER AVE |
| 2006 | Pain | Pedalcyclist | WASHINGTON AVENUE |
| 2006 | Pain | Pedalcyclist | NJ 35 |
| 2006 | Pain | Pedestrian | OCEAN COUNTY 635 |
| 2006 | Pain | Pedalcyclist | NEW JERSEY |
| 2006 | Moderate Injury | Pedalcyclist | OCEAN COUNTY 633 |
| 2006 | Moderate Injury | Pedalcyclist | OCEAN COUNTY 633 |
| 2006 | Moderate Injury | Pedestrian | NJ 35 |

Appendix B: FHWA Proven Safety Countermeasures

The Federal Highway Administration is promoting safety through proven roadway design features.

For a full list, see: https://safety.fhwa.dot.gov/provencountermeasures/

The following local examples show bicycle and pedestrian safety features from the list of countermeasures and should be considered when analyzing traffic safety solutions.

Refuge Islands

Link: https://safety.fhwa.dot.gov/provencountermeasures/ped_medians/





- · Reduces pedestrian crossing distance
- Greater pedestrian visibility
- Narrower lanes reduces driver speeding
- Flashing beacon alerts drivers
- Islands can be landscaped

Clarksville Rd, CR638, West Windsor NJ

Roundabouts

Link: https://safety.fhwa.dot.gov/provencountermeasures/roundabouts/





- Raised splitter island raised to form a pedestrian refuge
 - · Reduction in severe crashes
 - Urban, rural, suburban options

George Dye Rd and Estates Blvd, Hamilton NJ

Hybrid Pedestrian Beacon (HAWK Signal)

Link:

https://safety.fhwa.dot.gov/provencountermeasures/ped hybrid beacon/





- Pedestrians can cross midblock or uncontrolled intersections
- Pedestrians activate the signal
- Motorists stop completely

State Road 35, Seaside Heights NJ

Road Diet

Link: https://safety.fhwa.dot.gov/provencountermeasures/road_diets/





- Reconfigure four general travel lanes:
 - o Two general travel
 - o Center turn lane
 - o Bike lanes

West Windsor, NJ

Walkways

Link: https://safety.fhwa.dot.gov/provencountermeasures/walkways/





- Shared-use paths
- Streetscaping opportunities

Nassau Street, Princeton NJ

Leading Pedestrian Interval

Link: https://safety.fhwa.dot.gov/provencountermeasures/lead_ped_int/





• Pedestrian given time prior to motorist green signal

Nassau Street, Princeton NJ

Disclaimer

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