# WOODSTOWN-PILESGROVE SCHOOL DISTRICT

# MARY S. SHOEMAKER SCHOOL & WOODSTOWN MIDDLE SCHOOL















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# Woodstown-Pilesgrove School Travel Plan

Mary S. Shoemaker Elementary School & Woodstown Middle School

Prepared by:

# **Cross County Connection Transportation Management Association**

# May 2016

Cross County Connection Transportation Management Association was formally incorporated in 1989 through efforts of a group of southern New Jersey business leaders, local government officials, and representatives from the New Jersey Department of Transportation and New Jersey Transit Corporation to address mobility issues in the region and reduce the number of vehicles on state and local roadways. Today, Cross County Connection is a non-profit organization partnering with the New Jersey Department of Transportation, New Jersey Transit, Federal Highway Administration and its members to provide solutions to complex transportation problems for counties, municipalities, employers and commuters in Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester and Salem Counties.

A School Travel Plan is a document that helps to identify student walking and bicycling travel corridors (through student locations, crash data analysis, and existing pedestrian and bicycling infrastructure) and recommends infrastructure improvements to make them safer for students. A School Travel Plan helps to identify short term and long term solutions to help encourage students to walk and bicycle to school safely. The objective of a School Travel Plan is to create a safer walking and bicycling environment for students, encourage more students to walk and bicycle to school, reduce negative environmental impacts of automobile trips to school, and to establish healthy lifestyle habits of among schoolchildren through increased physical activity

This Cross County Connection Transportation Management Association publication is funded by the New Jersey Department of Transportation through the U.S. Department of Transportation Federal Highway Administration. The Federal Government and the State of New Jersey assume no liability for the contents.



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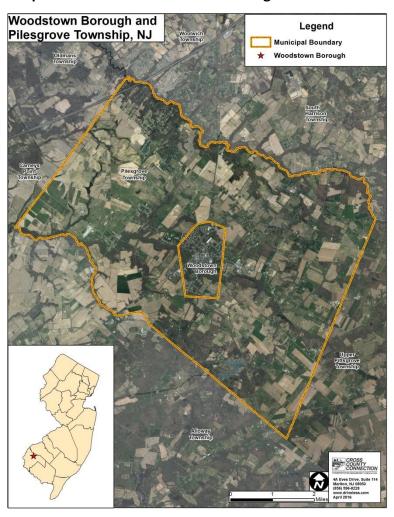
(Photographs Courtesy of Cross County Connection TMA unless otherwise noted)



# **1. INTRODUCTION**

The community of Woodstown Borough is located in northern Salem County, surrounded entirely by Pilesgrove Township. Neighboring municipalities include Mannington to the south, Upper Pittsgrove to the east, and Oldmans and Carney's Point to the west. Gloucester County borders Pilesgrove to the north. Woodstown Borough has а population of 3,497 with approximately 152 persons per square mile.

The Woodstown-Pilesgrove Regional School District serves students in Pre-Kindergarten through 12<sup>th</sup> grade. The school district consists of four schools: The William Roper Early Childhood Learning Center (Pre-K-K), Mary S. Shoemaker School (grades 1-5), Woodstown Middle School (grades 6-8), and Woodstown High School (grades 9-12). The Woodstown-Pilesgrove Regional School District recognizes the importance of active transportation for the health of



#### Map 1: Location of Woodstown Borough

children and the environmental health of their community. The school district seeks to increase the number of children who walk or bike to school. As part of the district's effort to create safe pedestrian corridors, improve health of students and reduce traffic congestions around the schools, the administration has chosen to develop a Safe Routes to School (SRTS) Travel Plan. The *Woodstown-Pilesgrove School Travel Plan* was created in collaboration with municipal representatives of Woodstown Borough and officials from the School District.

# Goals

The purpose of the School Travel Plan is to provide a summary of existing walking and bicycling conditions, identify potential infrastructure improvements, and recommend additional educational and encouragement activities to facilitate safe pedestrian and bicycling movement to and from Mary S. Shoemaker School and Woodstown Middle School. These objectives are consistent with the National Safe Routes to School Program goals for improving the health of schoolchildren through



increased activity, increased travel safety, and reducing reliance on motor vehicles to get to and from school. The goals of this Travel Plan are as follows:

- To encourage more students to walk to and from school
- To create safer walking and bicycling environment for students who wish to walk and bike to school
- To improve the overall health of schoolchildren through increased physical activity
- To establish healthy lifestyle habits among young schoolchildren that will continue into the future
- To reduce the negative environmental impact of automobile trips to schools, especially the effects of vehicles idling in close proximity to children

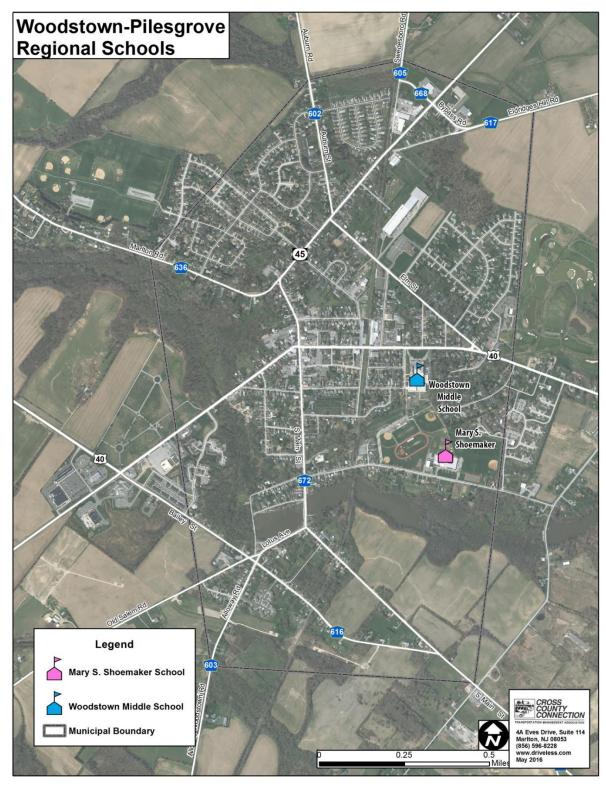
# **Project Overview**

Chapter 2 provides a brief overview of potential infrastructure improvements and treatments to enhance safety for children walking and bicycling to school. Chapter 3 assesses existing conditions and crash locations, while Chapter 4 identifies potential improvements for specific corridors based on the existing conditions analysis, input from Borough and School District representatives, and a walking audit of the area surrounding Mary S. Shoemaker School and Woodstown Middle School. Chapter 5 emphasizes how to integrate the 5 E's of the SRTS Program, which are: Evaluation, Engineering, Education, Encouragement and Enforcement, by identifying actions and programs to encourage more students to safely walk or bike to school. Chapter 6 summarizes the findings and includes a list of resources to assist Woodstown Borough and Woodstown-Pilesgrove Regional School District with advancing their SRTS initiative.

# **School Descriptions**

As shown on Map 2, Mary S. Shoemaker School is located along Millbrooke Avenue and is bordered by Friends Drive to the east and Shirley St to the west. The school is located in a residential neighborhood surrounded by recreational fields. Woodstown Middle School is located one quarter mile away along Lincoln Avenue, bordering East Avenue to the north. Both schools are located in a residential area, conducive to walking and bicycling to school where appropriate infrastructure exits. Sidewalks are located on all major roads surrounding both schools.





Map 2: Woodstown-Pilesgrove Regional Schools



# Working Group

This travel plan was developed by Cross County Connection in partnership with the SRTS working group members listed below (Table 1). Don Dietrich, Mayor of Woodstown Borough, was the primary contact for the Travel Plan and coordinated input from Woodstown School District and Borough.

Table 1: Woodstown-Pilesgrove School District SRTS Working	g Group
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Organization	Role	Contact
Cross County Connection TMA	SRTS Program	Sean Schweitzer, SRTS Coordinator
	Assistance	schweitzer@driveless.com
Borough of Woodstown	Implementation	Donald Dietrich, Mayor
		don.dietrich@comcast.net
Woodstown-Pilesgrove School	Implementation	Frank Rizzo, School Business
District		Administrator/Board Secretary
		rizzo.f@woodstown.org
Woodstown-Pilesgrove School	Implementation	Thomas Coleman, Superintendent
District		coleman.t@woodstown.org
Remington & Vernick	Implementation	John Cantwell, Engineer
Engineering		John.Cantwell@rve.com
Woodstown-Pilesgrove School	Implementation	Jennifer Hildebrand, Dean of Students at
District		Mary S. Shoemaker,
		hildebrand.j@woodstown.org
Woodstown Borough Police	Enforcement	Cris Simmermon, Police Officer
Department		csimmermon@woodstownpd.org
Woodstown-Pilesgrove School	Implementation	Diane Cioffi, Principal of Mary S.
District		Shoemaker School,
		cioffi.d@woodstown.org
Woodstown-Pilesgrove School	Implementation	Allison Pessolano, Principal of Woodstown
District		Middle School,
		Pessolano.A@woodstown.org



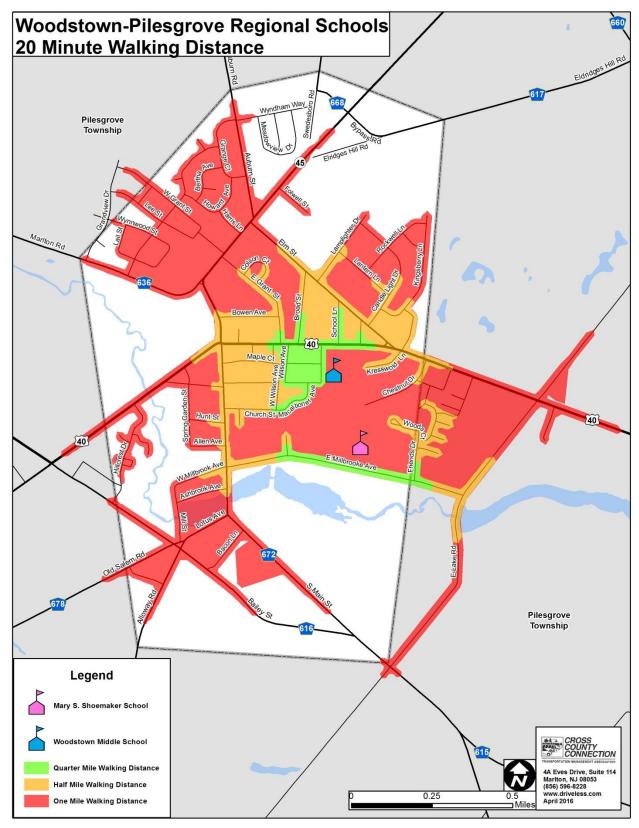
#### **Study Area and Scope**

This Travel Plan was prepared for the use of the Woodstown-Pilesgrove School District SRTS working group and its members. The Travel Plan considers the physical characteristics of Woodstown Borough's walking and bicycling infrastructure from the perspective of students aged 5-12. Physical environment observations, analysis, and recommendations are limited to areas where these students could walk or bike to school, based on methodology provided by the National Center for Safe Routes to School (NCSRTS). In order to prioritize the most critical physical infrastructure improvements to benefit the most students, areas closest to the school were selected for detailed analysis and recommendations in this Travel Plan. A study area of approximately 20 minutes (approximately 1 mile) walking radius was selected for Mary S. Shoemaker and Woodstown Middle School. The range of student travel is illustrated in Map 3. For infrastructure prioritization purposes, the area immediately surrounding the school, county roads, and roads with recorded pedestrian crashes were the focus of the study.

Students who attend Mary S. Shoemaker and Woodstown Middle School and whose homes are located within this 20 minute walking radius are dispersed throughout the Borough, as illustrated in Maps 4 and 5. With consideration to student locations, a twenty minute walking distance (shown in Map 3) was chosen to encompass a majority of the students from both schools that do and potentially can walk to school.

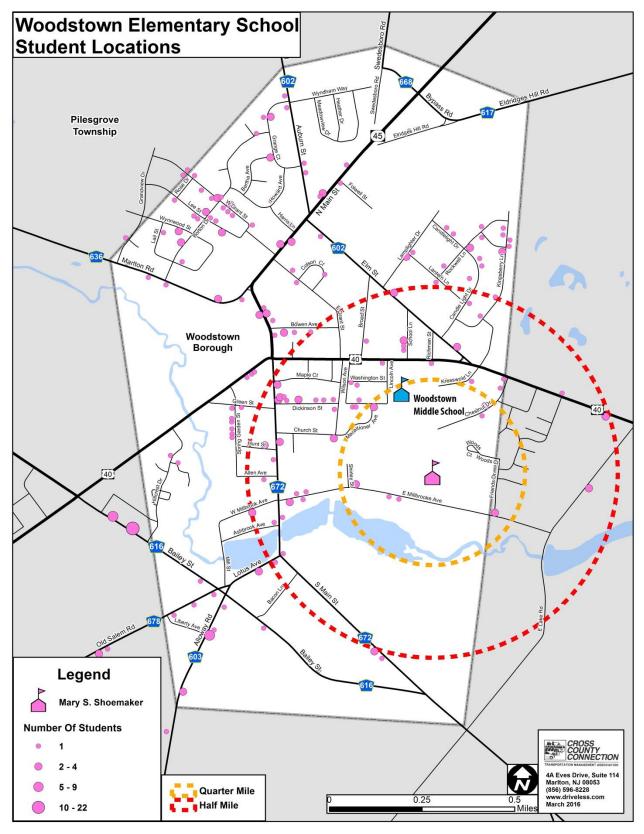
School program and policy analysis and recommendations are tailored to Mary S. Shoemaker and Woodstown Middle School, while non-physical aspects of the study, such as Borough ordinances and municipal activities, are considered Borough-wide.





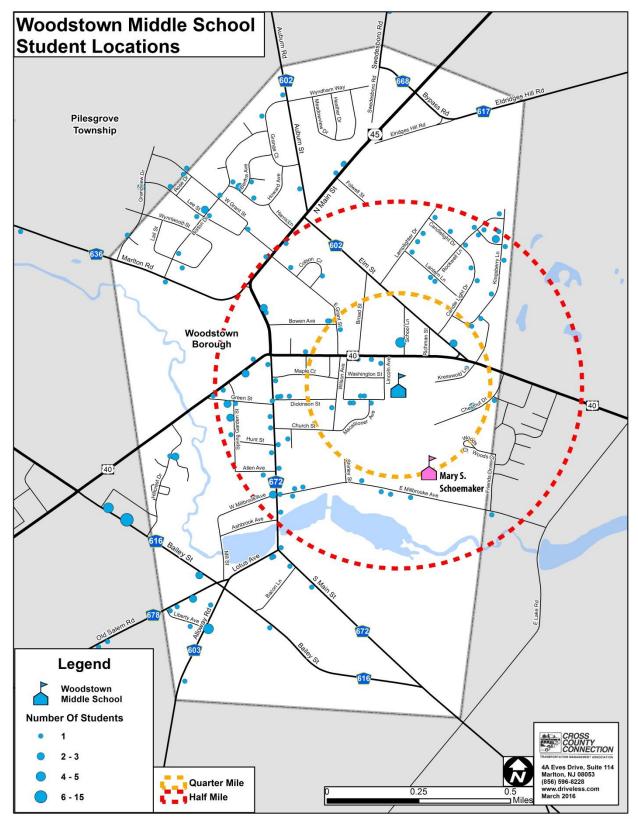






Map 4: Mary S. Shoemaker School Student Locations









# **2: INFRASTRUCTURE IMPROVEMENT STRATEGIES**

Communities can implement a variety of infrastructure improvements to enhance safety for bicyclists and pedestrians and facilitate safe and convenient student travel to and from school. This chapter provides a brief overview of common pedestrian and bicycle facilities, some of which are identified as potential improvements in Chapter 4. This chapter is intended to familiarize readers with these design treatments, but does not provide an exhaustive list of potential infrastructure improvements. Additionally, this chapter is not intended to serve as a design guide. Project designers and engineers should consult the respective engineering guidance when designing and implementing these facilities, such as NJDOT's School Zone Design Guide, American Association of State Highway and Transportation Officials' (AASHTO) *A Policy on Geometric Design of Highway and Streets*, AASHTO's Guide for the Development of Bicycle Facilities, the Federal Highway Administration's Manual on Uniform Traffic Control Devices (MUTCD), the National Association of City Transportation Officials' (NATCO) Urban Bikeway Design Guide, New Jersey Department of Transportation's (NJDOT) Roadway Design Manual, and others.

# **Pedestrian Improvements**

#### <u>Sidewalks</u>

Sidewalks are travel lanes for pedestrians. These facilities separate pedestrian travel from motor vehicle traffic, which greatly increases safety for walkers. Sidewalks are typically a minimum of five-feet wide and are often made of concrete, asphalt, or other materials. Biking on sidewalks is not permitted on streets in downtown Woodstown (See Appendix B). Bicycling on sidewalks can result in conflicts with pedestrians, which may create safety concerns. While it is appropriate for young children to ride on sidewalks with parental supervision, it may be appropriate for older children that receive bicycle safety education to ride on roadways that safely accommodate bike travel. Students at any age should always wear a properly fitted bicycle helmet.



#### Marked Crosswalks

Crosswalks exist at every intersection, regardless of whether they are marked with paint. Marked crosswalks, however, indicate preferred locations for pedestrians to cross, and help alert motorists to pedestrian crossing locations. Additionally, in New Jersey, motorists are required to stop for pedestrians in marked crosswalks, but are only required to yield to pedestrians in unmarked crosswalks. Marked crosswalks may also be used to indicate school walking routes, and may be desirable to install in locations where





there are many pedestrians, such as in downtown areas and near schools. There are a variety of marked crosswalks that are permitted by the Manual on Uniform Traffic Control Devices (MUTCD); however, the NJDOT School Zone Design Guide exclusively recommends the installation of bar style crosswalks (also known as piano key or continental type) due to their high visibility and durability.

#### <u>Signage</u>

Signs and pavement markings may be used to complement crosswalks, and can be helpful in alerting motorists to busy crossing locations. Chapter 3 of the New Jersey School Zone Design Guide details standards and guidance for the use of school zone signage, pavement markings, and related devices. This signage includes traditional pedestrian crossing signs, school-specific crossing signs, and signs with flashing warning lights. Woodstown has installed school zone signage with warning lights along East Avenue (Route 40) adjacent to Woodstown Middle School.



Flashing School Zone Signs, Rt. 40, Woodstown, NJ

In-street signs can be installed at uncontrolled, mid-block pedestrian crossings to help to make crosswalks more visible to drivers and encourage them to stop for pedestrians. These signs can only be installed at mid-block locations as they are prohibited by the 2009 MUTCD at signalized intersections. These signs can be permanently installed in the roadway or mounted on a portable base, which allows them to be easily taken in and out of the street. These signs must reflect the respective state law regarding whether motorists are required to yield or stop for pedestrians in a crosswalk. New Jersey law requires pedestrians to stop and stay stopped for pedestrians crossing the roadway within any marked crosswalk.



School Zone pavement markings can be used as an additional warning where vehicle speeds are a concern and should be placed close to school reduced speed zones or School Speed Limit sign assemblies. These markings are preferred on single lane local or collector streets, where they are visible from a distance and not obscured by heavy traffic.



Curb Ramp Curb ramps provide access to sidewalks from the roadway, which is particularly important for people using wheelchairs, parents with strollers, individuals that have difficulty stepping up and down curbs. Newly constructed or altered roadway projects are required to incorporate curb ramps in accordance with the Americans with Disabilities Act (ADA) design guidelines. ADA requirements also specify that curb ramps must be equipped with detectable warning surfaces (DWS) that provide a



warning to visually impaired pedestrians. Intersections should have two perpendicular curb ramps per corner, as opposed to a single diagonal ramp, because visually impaired individuals use these ramps to orient themselves toward crosswalks. Two ramps also allow pedestrians, strollers, and wheelchairs to cross without being forced into the intersection. ADA Guidelines state that curb ramps should be perpendicular wherever possible, where each corner has two ramps installed perpendicular to the face of the curb.

#### **Crossing Islands**

Crossing islands, or pedestrian refuge islands, are raised islands located in the center of a roadway at an intersection or mid-block crosswalk. These facilities provide pedestrians with a safe place to stop halfway across a roadway to deal with vehicle traffic traveling in one direction at a time. Slower-paced pedestrians can feel more comfortable crossing the street when crossing islands are present, and the installation of these facilities has been shown to decrease pedestrian-vehicle collisions and reduce vehicle speeds. Pedestrian refuge islands should be a minimum of 6 feet wide per ADA guidelines to



allow wheelchair and stroller users to safely pause on the island.



Curb Extensions

Curb extensions, also known as bump-outs or bulb-outs, extend the sidewalk or curb line into a parking lane, which reduces street width at an intersection. This improves pedestrian crossings by reducing the distance required to cross the street. These facilities also increase visibility for pedestrians since motorists are prevented from parking in or too close to a crosswalk. Curb extensions should only be used where there is a parking lane, and where transit and bicyclists would be traveling outside the curb edge.



# **Bicycle Improvements**

#### **Bicycle Routes**

Bicycle routes are a type of on-road bikeway. These facilities designate preferred routes for bicycle travel and indicate that a roadway is a shared travel environment for bicyclists and motorists. Bicycle routes can be marked with signage, such as "bike route" or "share the road" signs. These facilities may also be marked with "sharrow" pavement markings. These markings inform motorists to expect bicyclists and show bicyclists where to ride. Bicycle route and share the road signs can also provide bicyclists with wayfinding assistance. These treatments are preferable on low-speed, lowvolume roadways.



#### **Bicycle Lanes**

Bicycle lanes are another type of on-street bikeway. The installation of bicycle lanes designates space on a roadway for bicyclists with striping and pavement markings. These lanes, which are typically a minimum of five feet wide, are for the exclusive use of bicyclists and help to reduce conflicts between motorists and bicyclists. Standard bicycle lanes provide a minimal level of safety for cyclists. Studies show over 80 percent of potential cyclists would not use a typical unprotected bicycle lane due to safety concerns.





#### **Buffered Bicycle Lanes**

The addition of a painted buffer enhances safety by increasing the space between motorists and bicyclists. Often, flexible plastic bollards are installed in these buffers as an inexpensive physical barrier to offer cyclists further protection from vehicle traffic. Safe Routes to School programs have installed buffered bicycle lanes with plastic bollards for use by children traveling to school.



#### Separated Bikeways

Permanent physical protections, such as planters, modular curbs, trees, concrete sculptures, or pylons offer enhanced comfort and safety for bicyclists over painted buffers or plastic bollards. A lane of parked cars can also offer physical separation from moving vehicles. These facilities are often considered the most attractive by cyclists, parents, and residents, and have been shown to increase the bottom line of nearby businesses. High-quality separated bikeways with connections to parks and other destinations can also encourage tourism and associated spending, which brings additional benefits to the local economy.



Separated bikeway design has advanced significantly in recent years, and comprehensive manuals exist including the NACTO Urban Bikeway Design Guide (also applicable for suburban and exurban jurisdictions) and FHWA Separated Bike Lane Planning and Design Guide.



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# **3. EXISTING CONDITIONS**

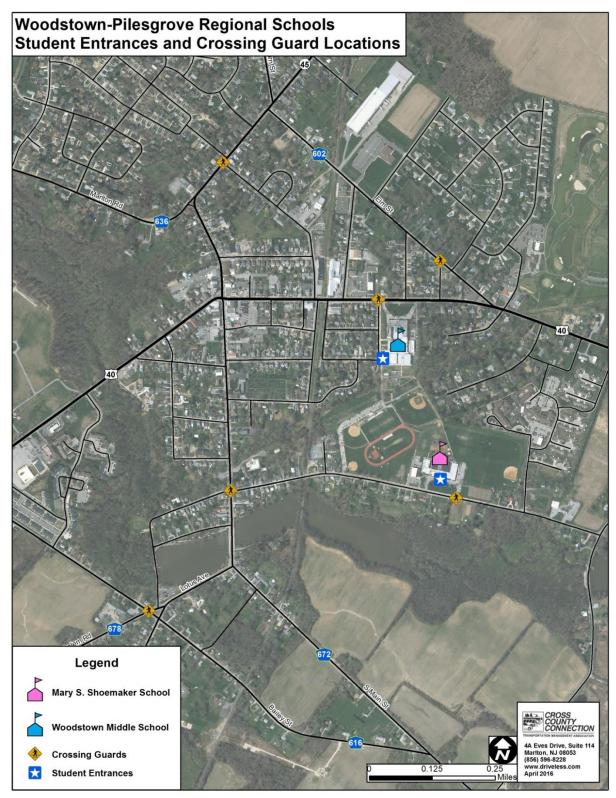
# **School Policies and Practices**

At the beginning of each school year, students and parents of Mary S. Shoemaker School and Woodstown Middle School are issued student handbooks outlining school transportation and arrival/dismissal policies. The student handbooks can also be found on the school district's website for each school. Courtesy busing is provided only to those students living outside a two mile radius of the school (excluding kindergarten students who are bused regardless of two mile radius). Students are permitted to walk or bike to school and each school is equipped with bicycle racks. Woodstown-Pilesgrove Township provides crossing guards at the following intersections within the study area (Shown in Map 6):

- South Main Street & East Millbrooke Avenue
- Bailey Street & Old Salem Road
- North Main Street & East Grant Street
- Elm Street & Richman Street
- East Avenue & Lincoln Avenue
- East Millbrooke Avenue (In front of Mary S. Shoemaker)



# Map 6: Drop Off and Crossing Guard Locations



Mary S. Shoemaker Elementary School Drop off & Pick up Policies



According to the Mary S. Shoemaker Student Handbook, school is in session from 7:30 AM – 2:35 PM. No student is permitted in the school prior to that time. See Appendix A for Mary S. Shoemaker School's full arrival and dismissal procedures. Students are permitted to walk or bicycle to school.

#### Woodstown Middle School Drop off & Pick up Policies

According to the Principal of Woodstown Middle School, students are permitted to walk and bicycle to school. Students are able to enter the building at 7:15am and must proceed to the multipurpose room until 7:35am, when they are allowed to proceed to homeroom. The late bell is at 7:45am. Students are to enter at the front of the building through the entrance to the right of the main entrance to the middle school on Lincoln Avenue. Students are dismissed at 2:35pm.

Working group members noted that arrival and dismissal procedures are more orderly at Mary S. Shoemaker School than Woodstown Middle School. Middle School officials should consider formalizing similar arrival and dismissal procedures to enhance safety for students walking and biking to the middle school.

# **Municipal Policies and Practices**

In addition to supporting the Safe Routes to School (SRTS) program, Woodstown Borough has demonstrated its commitment to improving safety for pedestrians, bicyclists, and other roadway users by adopting a Complete Streets policy. Complete Streets are roadways designed for users of all modes of travel, and any age or ability. While a Complete Street will vary depending on local context, these roadways often include one or more elements such as sidewalks, crosswalks, curb ramps, bicycle lanes, and transit shelters. Adopting a Complete Streets policy directs transportation planners, engineers, other government staff and officials to consider and balance the needs of everyone in transportation projects, and it helps formalize the idea and practice of routinely accommodating all users in transportation projects.

Woodstown Borough adopted its Complete Streets policy in May 2016. This initiative complements and supports the Safe Routes to School (SRTS) program as the Borough routinely considers all roadway users, including children, in transportation projects. Findings from the Woodstown-Pilesgrove School District Travel Plan should be considered during the implementation of the Borough's Complete Streets policy, particularly for projects in the vicinity of Mary S. Shoemaker and Woodstown Middles Schools by implementing pedestrian and bicycle accommodating infrastructure. The Borough of Woodstown has taken action in creating a complete sidewalk network throughout the Borough by adopting an ordinance in 2002 that requires property owners install or maintain sidewalk adjacent to their property (See Appendix C). Even with the aforementioned ordinance, the Borough of Woodstown still has many gaps within their sidewalk network that needs to be addressed (see map 10).



# **Recent Grants**

Woodstown Borough received a Community Development Block Grant (CDBG) of \$400,000 to install approximately two dozen crosswalks around the Borough to make walking for students and residents safer. Woodstown used \$42,000 from the CDBG to put in sidewalk on the south side of Alloway Road and around the curve of Mill Street, past Lotus and Old Salem Road. This area was razed of trees that encroached on the side of the road, where more than 40 students (from Mary Shoemaker and Woodstown Middle Schools) walk to get to school and to prepare for sidewalk consideration. Woodstown Borough has also used \$15,000 of its Open Space Tax funds to acquire 2.5 acres where the tree stumps along Bailey Street are located. The Borough of Woodstown's sole purpose for acquiring this land was to ultimately apply for the Safe Routes to School grant in 2016, to eventually install sidewalk, curbs, and shoulder along Bailey Street where there currently is none. Additionally, the county used funding from the New Jersey Department of Transportation (NJDOT) to repair and install infrastructure on Maple Court, which students use to get to Woodstown Middle School.

# **Travel Mode**

Student travel tallies were conducted by teachers at Mary S. Shoemaker School (in fall 2015) and Woodstown Middle School (in spring 2016) over a three day period (Tuesday, Wednesday, Thursday). A breakdown of how students travel to school is shown in Table 2.

Travel Mode	Mary S. Shoem	aker School	Woodstown Middle School	
Travel Wode	Students	% Total	Students	% Total
Walk	43	11.4%	70	33.2%
Bike and Other Wheels	3	0.8%	5	2.4%
Bus	153	40.9%	48	22.7%
Car	175	46.9%	88	41.7%
Total Students	374	100%	211	100%

#### **Table 2: Student Population Travel Mode**

Woodstown-Pilesgrove Regional School District provides busing to students that live outside a twomile boundary from the designated school the student attends. As shown in Table 2, 11% and 33% of students, respectively, at Mary S. Shoemaker and Woodstown Middle Schools walk to school, where as 47% and 41% of school students, respectively, from Mary S. Shoemaker and Woodstown Middle Schools are driven to and from school.

The results of the student travel tallies are indicative of the vehicle congestion which was observed by Cross County Connection TMA at arrival times for both schools. School and municipal officials have reported traffic congestion at both schools during arrival and dismissal times, which can create dangerous circumstances for students who are walking or bicycling to and from school.

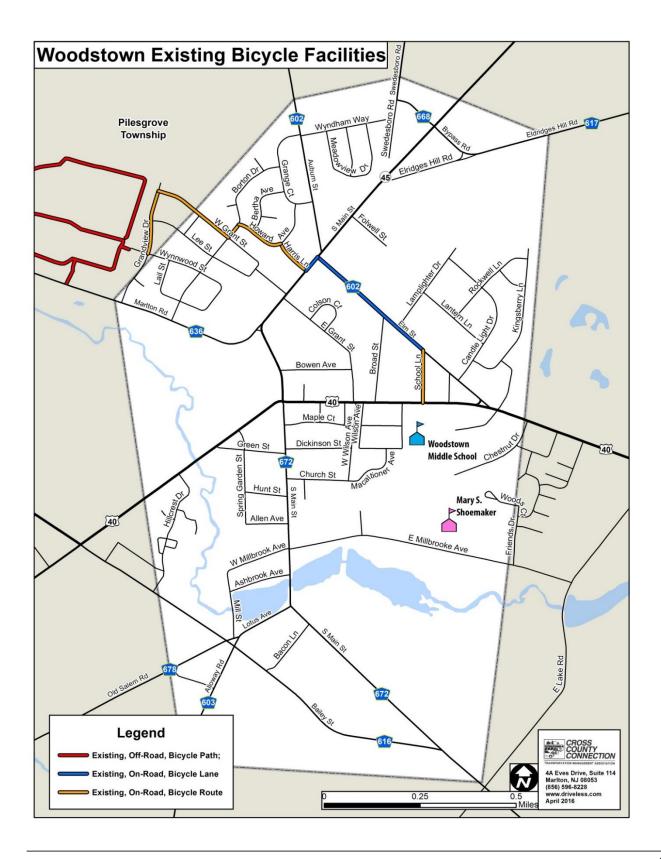


# **Bicycle Facilities**

Woodstown has limited existing bicycle infrastructure throughout the Borough. The only streets that currently have on-street bicycle lanes are North Main Street (starting at Harris Lane going north through Elm street) and Elm Street starting from North Main Street through the intersection of School Lane. School Lane, from Elm Street to the intersection of School Lane and Route 40, is currently an on-road bicycle route, but with no designated lanes or signs. Other streets that currently have existing on/off-road bicycle routes are shown in Map 7. Bicycle racks are provided at both schools. Woodstown Middle School has bicycle racks on the southern side of the school for students to use.









# **Bicycle and Pedestrian Crashes**

There were three bicycle crashes and seven pedestrian crashes between 2011 and 2015 in the study area, shown in Tables 3 and 4 and Map 8. Crash data was collected from Plan4Safety, a statewide database maintained by the Center for Advanced Infrastructure and Transportation (CAIT) at Rutgers University. In each of these crashes, a moving vehicle struck a pedestrian or bicyclist.

#### **Pedestrian Crashes**

Of the eight pedestrian crashes, all occurred within one mile of the schools. All also occurred on routes used by students to travel to school. Three of the eight crashes occurred during school hours or afterschool program hours (7 AM to 6 PM, Monday through Friday), and five of the eight pedestrians struck complained of pain or had moderate injuries. In three of the cases only property damage was reported.

Location	Date	Time	Injuries	Total Pedestrians Involved
Wawa Parking Lot	2/26/2011	11:18 PM	Pain	1
50 E Grant St			Moderate Injury	
(Parking Lot)	5/27/2012	10:44 AM		1
North Main Street	12/26/2012	5:20 PM	None	1
North Main Street	2/21/2013	10:05 PM	None	1
South Main Street	10/25/2013	1:38 PM	None	1
Bailey Street	10/23/2014	7:01 AM	Moderate Injury	1
North Main Street	1/26/2015	8:58 PM	Moderate Injury	2
West Avenue	5/2/2015	11:40 AM	Pain	1

#### Table 3: Study Area Pedestrian Crashes, 2011-2015

#### **Bicycle Crashes**

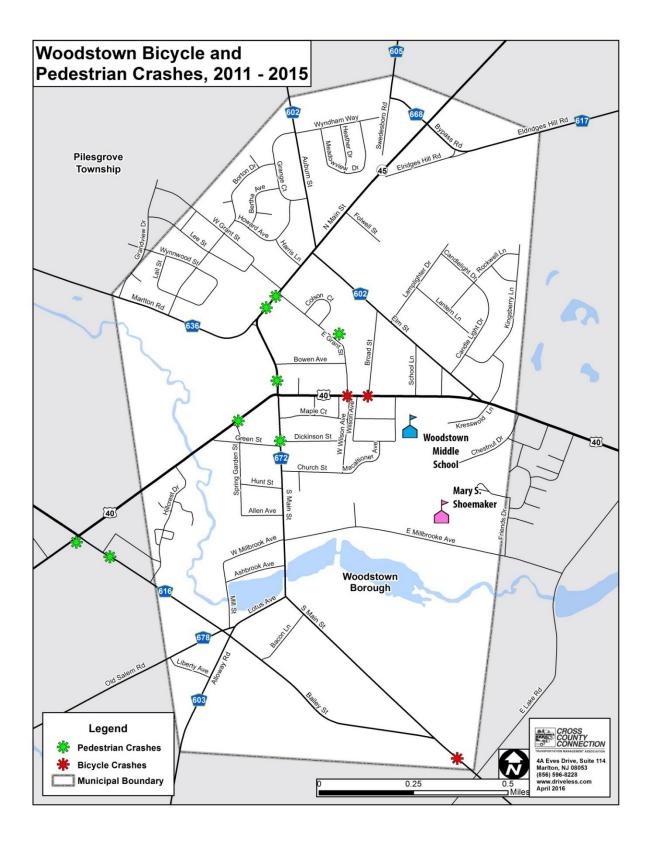
A total of three bicycle crashes occurred, two of which occurred in the immediate vicinity of Woodstown Middle School on a route used by students to walk to school. One bicycle crash was farther from the schools on S. Main Street in the far southeast corner of Woodstown Borough. Of the three crashes, one occurred during school hours or afterschool hours. No injuries were reported.

#### Table 4: Study Area Bicycle Crashes, 2011-2015

Location	Date	Time	Injuries	Total Cyclists
				Involved
East Avenue	6/23/2012	12:09 PM	None	1
South Main Street	2/15/2014	7:28 AM	None	1
East Avenue	8/28/2014	8:56 AM	None	1



## Map 8: Woodstown Bicycle and Pedestrian Crashes





# 4. AUDIT FINDINGS AND CORRIDOR RECOMMENDATIONS

A walking audit was conducted on May 9, 2016 to assess walking and bicycling conditions and document areas in need of infrastructure improvement. The study area consists of approximately a twenty minute walking radius (one mile) from Mary S. Shoemaker School and Woodstown Middle School. The following analysis is based on observations from the walking audit and discussions with participants from the SRTS working group, who relayed input from parents. The working group met with Cross County Connection prior to the audit to provide specific input to guide the assessment of existing conditions. The audit was held in clear weather from 10:00 AM to 2:00 PM with a temperature of approximately 67 degrees. Participants included the Mayor of Woodstown; an officer from Woodstown Police Department; and Cross County Connection's Complete Streets Coordinator and Transportation Specialist. Additional follow-up field work was conducted by Cross County Connection's Safe Routes to School Coordinator, Transportation Specialist, and Senior Land Use and Transportation Specialist on Wednesday May 25<sup>th</sup> from 7:00 AM until 10:00 AM.

# **Corridor Selection**

The student populations of Mary S. Shoemaker School and Woodstown Middle School are dispersed throughout the Borough of Woodstown and Pilesgrove Township, which comprise a regional school district. Audits were conducted along major and minor student travel corridors identified by the working group, which are shown in Map 9 and listed below.

Major student travel corridors include:

- NJ Route 40 (East & West Avenues)
- North & South Main Street (NJ Route 45 and Salem County Road 672)
- East Millbrooke Avenue
- Lincoln Avenue, Macaltioner Avenue & Church Street
- Lotus Avenue

Minor student travel corridors include:

- Elm Street (County Road 602)
- East Grant, West Grant Street & Lee Street
- School Lane
- Marlton Road (County Road 636)
- Bailey Street
- Alloway Road (County Road 603)
- Old Salem Road (Count Road 678)

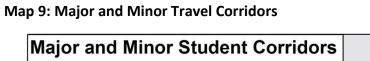
Some of the student travel corridors already feature infrastructure conducive to walking and bicycling, such as fully connected sidewalks, ADA accessible pedestrian curb ramps, marked crosswalks at intersections, and calm traffic due to low speed limits. For other corridors, safety concerns are identified and suggested infrastructure improvements are outlined to encourage safe

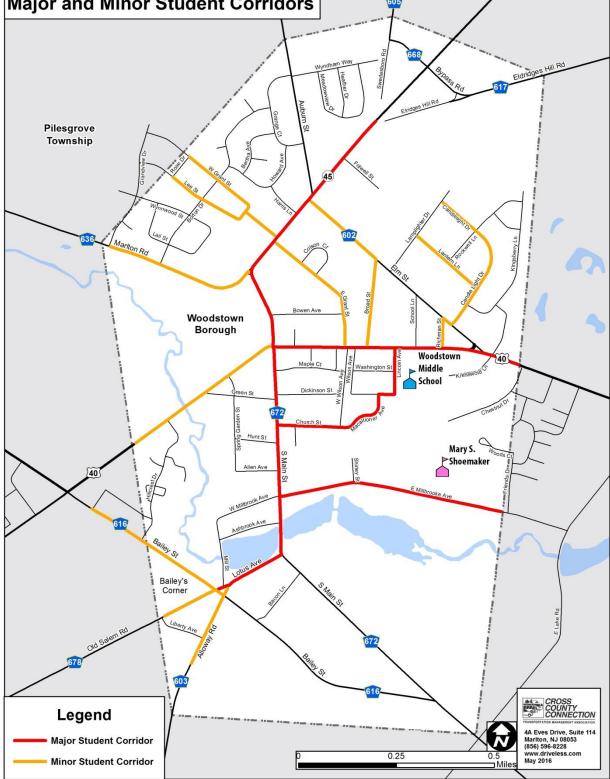


walking and bicycling to and from Mary S. Shoemaker School and Woodstown Middle School. Recommended improvements are shown in Map 11 and are discussed in more detail throughout the chapter.

These recommendations are based on an assessment of existing conditions, input from the working group, findings from the audit, sound planning judgement, and guidelines set by the American Association of State Highway and Transportation Officials (AASHTO), the National Association of City Transportation Officials (NACTO), and the New Jersey Department of Transportation (NJDOT). These recommendations are intended to enhance safety and facilitate student travel to and from school. Recommendations found in the Woodstown-Pilesgrove School Travel Plan are general in nature, and Cross County Connection recommends further engineering analysis before implementing any of the recommendations in this plan.









# **Overall Recommendations**

#### **Crosswalks**

Many crosswalks are not marked in Woodstown Borough. Of those that are marked, almost all feature low-visibility striping patterns. This is especially concerning on high-volume roads with higher speed limits. High visibility crosswalks should be provided as frequently as possible, and at intervals of no greater than 500 feet, as per NJDOT guidelines. High-visibility bar style (continental) crosswalks should be considered at all intersections within ¼ mile of the schools, and any additional busy intersections within the Borough.

#### **Missing Sidewalk Segments**

There are intermittent missing sidewalk segments throughout Woodstown Borough where property owners have not installed sidewalks. Some of these interruptions to the sidewalk network are located on major county roads with high speed limits and traffic volumes, posing a significant safety concern for students who walk or bike to school. Sidewalks should be installed to complete these missing segments wherever possible to create a cohesive sidewalk network, allowing students to walk from their homes without having to walk in busy roadways. Missing sidewalk segments along major and minor student travel corridors lack ADA-compliant curb ramps and are shown in Map 10.

#### **Obstructed Sidewalks**

On many sidewalk segments in Woodstown, utility poles, mailboxes, trash cans, brush piles, or other obstructions block the pedestrian walkway. Large permanent obstructions such as utility poles pose a particular concern, as they prevent strollers or wheelchairs from ever using the facility. Where utility poles or other obstructions are present, sidewalks should be redirected around them, curving inward away from the roadway, to preserve an unobstructed pedestrian passage.

Where possible, new sidewalks should be constructed with a minimum two foot planting strip between the curb and the sidewalk, to prevent issues with utility pole obstructions.

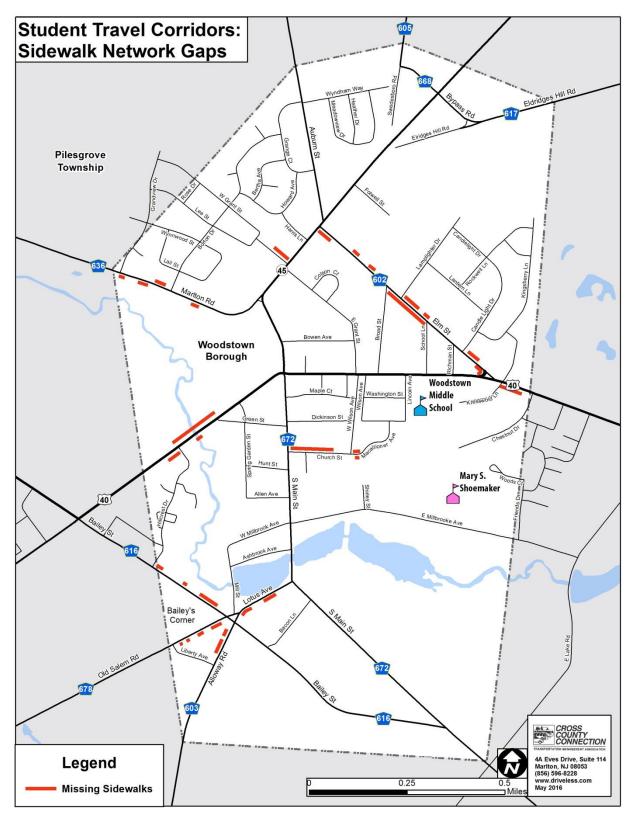
Given the width of most streets, the Borough could also instruct residents to place trash cans and brush piles on the side of the road instead of on the sidewalk to keep the pedestrian walkway clear. These items could also be placed in a planting strip if one were present.

#### ADA Improvements

ADA improvements, including the installation of curb ramps and tactile warning strips should be implemented at any intersections with pedestrian facilities (e.g. crosswalks or sidewalks) where they are missing.

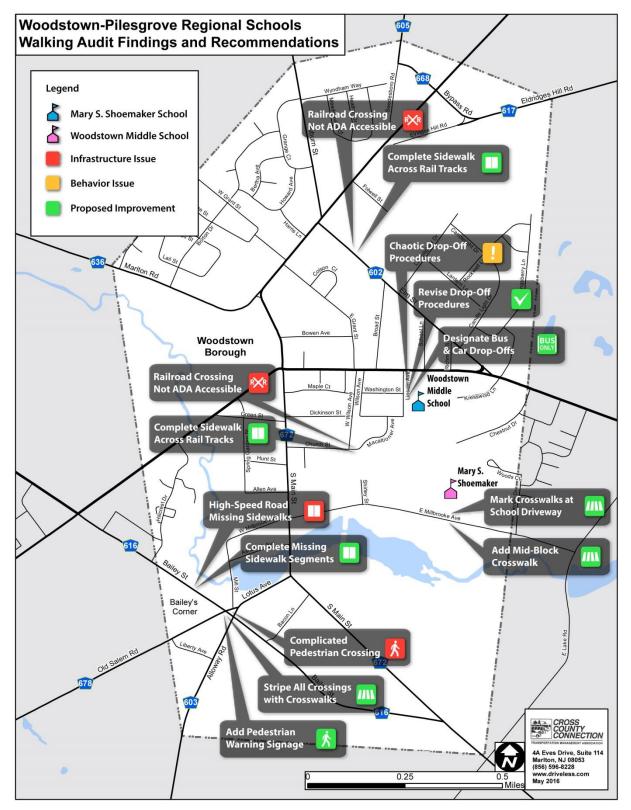
Additional recommendations are tailored to each student travel corridor. Recommendations are shown in Map 11 and described in the coming sections.











Map 11: Recommended Infrastructure Improvements



# Major Corridor: NJ Route 40 (East & West Avenues)

NJ Route 40 is a recommended travel route for students attending Mary S. Shoemaker School and Woodstown Middle School due to the presence of connected pedestrian facilities, its proximity to the school, and its function as an important east-west connection between the school grounds and students' homes. Woodstown Middle School is located on Route 40 and a crossing guard is stationed at the intersection with Lincoln Avenue.

#### **Roadway Characteristics**

Route 40 is a two lane road with intermittent parallel parking on both sides that bisects Woodstown Borough as the primary eastwest connector. Route 40 has a speed limit of 35 miles per hour in the vicinity of Woodstown Middle School and throughout downtown Woodstown. The speed limit is 45 miles per hour at the Borough borders, and 50 miles per hour outside the Borough.

Crossings of Route 40 at Lincoln Avenue and School Lane feature high-visibility bar style crosswalks.

High-speed traffic entering Woodstown Borough is calmed on Route 40 through a variety of measures. Visual cues create a

Speed Limit	35 - 50 MPH
Travel lanes	2, 12'
Parking Lanes	2, 8'
Sidewalks	Continuous on both sides
Crosswalks	High-visibility at Lincoln Avenue and School Lane. Other faded or missing.
Signals	North Main Street, no pedestrian countdown signal
Signage	Handicap Crossing 500 Ft, School Speed Limit 25 MPH When Flashing, School Crossing 400 Ft, School Crossing Ahead, School Crossing
Curb extensions	None
Crossing Guards	Police Officer at Lincoln Avenue
Ped-Scale	
Lighting	None
Bicycle lanes	None
Bicycle signage	None
Street trees	Intermittent tree canopy cover
Driveways	Many
Median	Intermittent painted (turn lane)
Suggested Improvements	Consider rectangular rapid flashing beacon (RRFB), High-intensity activated crosswalk (HAWK), or full traffic signalization of Lincoln Avenue intersection; paint high-visibility bar style crosswalks throughout corridor in Woodstown; install ADA curb ramps as necessary to facilitate crossing of Route 40

sense of enclosure, provided by close building setbacks to the street and the presence of mature street trees. Traffic is further calmed through on-street parallel parking and ample signage alerting drivers to the presence of pedestrians. In addition, a police officer is present at the intersection of Route 40 and Lincoln Avenue, at school arrival and dismissal times, to direct traffic and facilitate safe student crossings.



#### Transportation Concerns

The northern approach to the crosswalk across Route 40 at Lincoln Avenue may not be ADA compliant. Other intersections between Lincoln Avenue and North Main Street -- with the exception of east Maple Avenue -- lack marked crosswalks across Route 40, and do not have ADA-accessible curb ramps for these crossings.

Existing school zone speed signs are difficult to see and do not provide speed feedback to drivers. Additionally, two bicycle crashes occurred on Route 40 near Woodstown Middle School.

#### **Recommendations**

High-visibility bar-style crosswalks and ADA curb ramps should be installed to facilitate pedestrian crossing of Route 40 between Lincoln Ave and North Main Street.

School speed signs could be updated to be more visible and include an active speed detector.

The speed limit on Route 40 through Woodstown Borough could be lowered to 25 miles per hour. Bicycle lanes or shared lane markings (sharrows) could be marked on Route 40 through Woodstown Borough to improve bicycle safety.



Flashing School Speed Limit Sign, Route 40, Woodstown, NJ



Example of Speed Detector in School Zone



# Major Corridor: East Millbrooke Avenue

East Millbrooke Avenue is a recommended travel route for students that attend Mary S. Shoemaker School because it forms part of the perimeter of the school and has connected pedestrian facilities from the western and southern portions of Woodstown Borough.

#### **Roadway Characteristics**

East Millbrooke Avenue is a 25 mile per hour residential street with parallel parking on both sides, relatively calm traffic, and very low traffic volumes.

A railroad crossing is present between South Main Street and Shirley Street. This crossing has been recently upgraded to include ADAcompliant sidewalks on both sides.

#### Transportation Concerns

Currently, there are no sidewalk connections from the eastern approach of Millbrooke Avenue to the school entrance, forcing walkers and bikers into a shared bus and car driveway loop. Although a sidewalk exists along the front of the school entrance and

Speed Limit	25 MPH
Travel lanes	2, 10'
Parking Lanes	2, 7'
Sidewalks	Continuous on both sides to Friends
	Drive. Primarily farmland past
	Friends Drive.
Crosswalks	High-visibility at Lincoln Avenue and
	School Lane. Other faded or missing.
Signals	South Main Street, no pedestrian
	countdown signal
Signage	Railroad Crossing, School Crossing
Curb extensions	None
<b>Crossing Guards</b>	In front of school
Ped-Scale	
Lighting	None
Bicycle lanes	None
Bicycle signage	None
Street trees	Intermittent tree canopy cover
Driveways	Few
Median	None
Suggested	Add high-visibility crosswalks across
Improvements	school driveways, add mid-block
	crosswalk across E. Millbrooke Ave.
	in front of school, connect sidewalks
	to school entrance

on the western-most approach to the school, it is disconnected by a parking lot entrance driveway with no crosswalk. Cars parallel park in front of the school and along its driveways within 25 feet of unmarked crosswalks.

Additionally, in the sidewalk segments between the school and South Main Street, multiple utility poles obstruct the walking path and prevent strollers or wheelchairs from using the facility.

#### **Recommendations**

A high-visibility mid-block crosswalk with ADA compatible curb ramps could be installed across East Millbrooke Avenue in front of the Mary S. Shoemaker School to facilitate student crossing of the street in front of the school. The crossing guard and this painted crosswalk should be relocated.

All sidewalk network interruptions at school driveways should be marked with high-visibility bar style crosswalks. ADA-compliant curb ramps should be added where missing.



Sidewalks should be fully connected in front of the school to facilitate safe and organized student entry and egress via pedestrian or bicycle modes. Sidewalks should be installed to facilitate student access from East Millbrooke Avenue that is physically separated from the bus and car driveway loop.

Cars should not park within 25 feet of crosswalks to facilitate student visibility. No parking zones next to crosswalks could be striped with paint and designated with signs. Flexible delineators (bollards) could be installed to prevent illegal parking and dangerous visibility obstructions.

Where utility poles or other obstructions are present, sidewalks on East Millbrooke Avenue should be redirected around them to preserve a four-foot unobstructed pedestrian passage.

Mary S. Shoemaker School Existing Conditions



Mary S. Shoemaker School Recommendations





## Major Corridor: Lincoln Avenue

Lincoln Avenue is a north-south corridor where Woodstown Middle School is located. Lincoln Avenue is a heavily used corridor by buses and parents dropping off and picking up students.

### **Roadway Characteristics**

Lincoln Avenue is a one-way road with 2 hour parking from 7:00AM-4:00PM on the western side (so students do not park there), whereas there is "no stopping or standing, school bus loading and unloading zone only" on the eastern side next to the school. A section of Lincoln Avenue closest to the school is marked off showing that there is no parking permitted. There is continuous sidewalk on both sides of Lincoln Avenue and ADA compliant curb ramps at the intersections of Washington Street and East Avenue and Lincoln Avenue. Continental crosswalks are present at both intersections, as well.

## Transportation Concerns

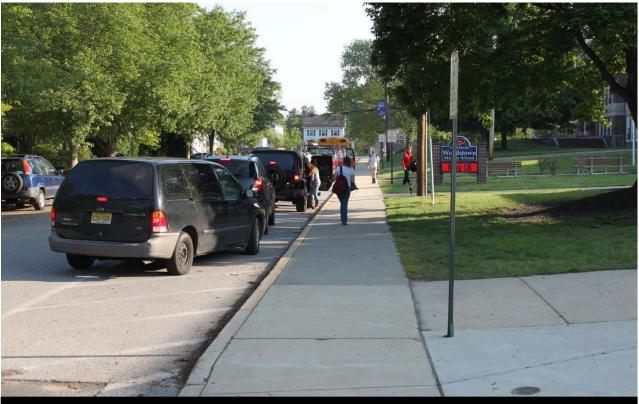
There is no marked bus and/or carpool drop off lane which causes minor congestion on Lincoln Avenue in front of the Middle School where parents and buses dropping off and picking up have created a backup of cars and buses along Dickinson Street and onto Macaltioner Avenue.

Recommendations	5

Speed Limit 25 MPH (not posted) Travel lanes 1, 12' Parking Lanes 1, 7' Sidewalks Continuous on both sides Crosswalks Ladder crosswalk at corner of Lincoln Avenue and E. **Dickinson Street and bar** crosswalks at Lincoln Avenue and Washington Street Signals None No stopping or standing; Signage school bus loading and unloading zone only, One way sign, 2 hour parking **Curb extensions** None At the intersection of Lincoln **Crossing Guards** Avenue and East Avenue Ped-Scale Few Lighting **Bicycle lanes** None **Bicycle signage** None **Street trees** Intermittent tree canopy cover Driveways Few Median None Suggested Install collapsible bollards Improvements along road closest to the Middle School

A designated bus and carpool lane should be marked in front of the Middle School to prevent a backup of cars and buses along Lincoln Avenue, Dickinson Street, and Macaltioner Avenue. Temporary cones or collapsible bollards may be used to create two separate lanes to make drop-off and pickup more efficient and less congested during arrival and dismissal times. Collapsible bollards are suggested since they can be folded down into the road after school hours. Police should also be present at arrival and dismissal times to enforce "no stopping" signs in front of the Middle School.





Parents drop off students in "No Stopping" area creating congestion in front of Middle School.





## **Major Corridor: Macaltioner Avenue**

Macaltioner Avenue is a major east-west travel corridor that Woodstown Middle School students use to get to school. Macaltioner Avenue is a residential street which starts at the rail road crossing and ends at the intersection of Dickinson Avenue.

### **Roadway Characteristics**

Macaltioner Avenue has on street parking on the southern side only. It is two hour parking from 7:00AM-4:00PM on the southern side of Macaltioner Avenue and there is a sign posted on the northern side of the road stating there is no parking on the northern side of the street to deter students from parking along the street. Student and faculty parking is provided at Woodstown High School and Middle School.

There is continuous sidewalk on both sides of Macaltioner Avenue except at the rail road crossing where there are sidewalk disconnections on both sides of the street. The parking lane and center lines are not striped giving the street a wider appearance. There is a standard crosswalk at the intersection of Macaltioner Avenue and East Dickinson Street.

Speed Limit	25 MPH (not posted)	
Travel lanes	2, 12'	
Parking Lanes	1, 6'	
Sidewalks	Continuous on both sides	
Crosswalks	Standard bar crosswalk at Dickinson Avenue	
Signals	Rail road crossing signal at Macaltioner Avenue and W. Wilson Avenue	
Signage	Rail Road crossing sign, no parking on northern side of street	
Curb extensions	None	
Crossing Guards	None	
Ped-Scale Lighting	Few	
Bicycle lanes	None	
Bicycle signage	None	
Street trees	Intermittent tree canopy cover	
Driveways	Many	
Median	None	
Suggested Improvements	Install ADA compliant sidewalk across Rail Road crossing at the connection of Church Street and Macaltioner Avenue	

### Transportation Concerns

Students must cross over rail road tracks (train comes through once a week) that are not ADA compliant and lack connecting sidewalk from Church Street to Macaltioner Avenue. This has lead students to walk in the street or over unprotected rail road tracks which can lead to potential hazards for students. There is no cross arm to deter students from walking while a train approaches as well, which poses an additional safety concern.



### **Recommendations**

Sidewalks should be installed across the rail road crossing between Church Street and Macaltioner Avenue creating a connected travel corridor for students. ADA compliance should also be taken into consideration when installing sidewalks across a rail road crossing.



Lack of sidewalk and ADA compliance across rail road tracks to Macaltioner Avenue



## **Major Corridor: Church Street**

Church Street is a recommended major travel route for Woodstown Middle School students living along South Main Street and where Bailey Street, Old Salem Road, Alloway Road, and Lotus Avenue meet. Church Street is an east-west corridor that merges with Macaltioner Avenue at a rail road crossing at the intersection of West Wilson Avenue and Church Street.

### **Roadway Characteristics**

Church Street is a suggested travel corridor due to its low traffic volume and speed limit (25MPH). There is no sidewalk along the north side of Church Street where the First Baptist Church is located, until past the church where the sidewalk resumes. There is continuous sidewalk along the southern side of Church Street as well as on street parking only permitted on the southern side of Church Street. Parking lanes are not striped and there is no striped center line, lending a wider appearance to each travel lane. A railroad crossing is located at the eastern end of Church Street where it merges into Macaltioner Avenue once across the rail road crossing.

### Transportation Concerns

The lack of a high-visibility crosswalk across South Main Street to Church Street is an issue since some students live on the west side of South

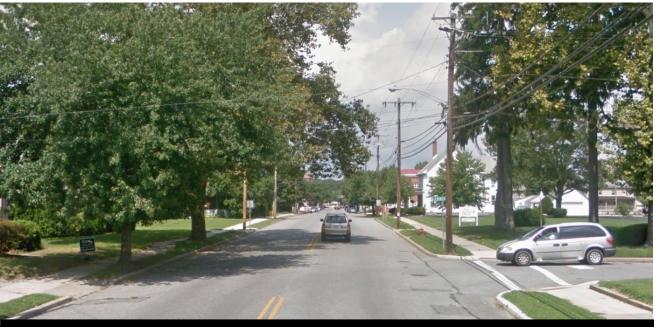
Main Street and must cross the high volume and high speed road to get to Church Street.

### **Recommendations**

A high-visibility crosswalk across South Main Street to Church Street should be installed at the intersection to ensure students who live on the western side of South Main Street can cross safely to Church Street. Pedestrian crossing signs (blinking and in road) should be installed to alert drivers of the crosswalk as well as help to reduce travel speeds when approaching the crosswalk.







Lack of high-visibility crosswalk and pedestrian signage for students crossing to Church Street



# Major Corridor: NJ Route 45 and County Road 672 (North & South Main Street)

NJ Route 45 and County Road 672 (North and South Main Street respectively) is a major northsouth corridor in which students from both Mary S. Shoemaker School and Woodstown Middle School use to walk to school. North and South Main Street is a recommended corridor due to its continuity of sidewalks on both sides as well as other pedestrian infrastructure that creates a safe walking corridor for students.

## **Roadway Characteristics**

North and South Main Street is a major northsouth arterial corridor of Woodstown Borough into which many minor travel corridors, where students live, funnel. It is a two lane road with onstreet parking permitted where marked. North Main Street has high traffic volumes with a posted speed limit of 35 miles per hour along North Main Street from Route 40 and to the north. The designated speed limit south of Route 40 along South Main Street is 25 miles per hour. The Majority of the crosswalks have pedestrian signage with marked crosswalks. Crossing guards are located at Grant Street and East Millbrooke Avenue along North Main Street. There are marked bicycle lanes along North Main Street from Elm Street to Harris Lane with a "Bicycle Lane" sign and in street markings. There has been recent repaving of North Main Street as well as installation of ADA curb ramps. Crosswalks were unmarked during the walking audit.

Speed Limit	North Main Street (NJ Route 45) – 35MPH South Main Street (CR 672) – 25MPH	
Travel lanes		
	2, 12'	
Parking Lanes	2, 8'	
Sidewalks	Continuous sidewalk on both sides of North and South Main Street	
Crosswalks	Standard bar crosswalks at all intersections along North Main Street and South Main Street	
Signals	Traffic signal at Route 40	
Signage	Pedestrian crosswalk signage at major intersections, bike lane sign at Grant Street.	
Curb extensions	None	
Crossing Guards	At the intersections of East Millbrooke Avenue and East Grant Street	
Ped-Scale Lighting	Intermittent	
Bicycle lanes	Along North Main Street from Elm Street to Harris Lane	
Bicycle signage	Yes	
Street trees	Intermittent tree canopy cover	
Driveways	Intermittent	
Median	Yes	
Suggested Improvements	Paint high-visibility crosswalk across major intersections as well as review ADA compliance	
	at major intersections.	

## Transportation Concerns

The observed travel concerns regarding North and South Main Street are the lack of highly visible crosswalks at major intersections and ADA compliance of curb ramps at crosswalks. There were four pedestrian crashes that occurred along North and South Main Street; two immediately south of East Grant Street, one immediately south of Bowen Street, and one at the intersection of South Main Street and Dickinson Street. Areas in which pedestrian crashes occurred should be reviewed for high visibility crosswalks and visible pedestrian crossing signage.



### **Recommendations**

Due to the high traffic volumes and speed limit along North Main Street, north of Route 40, highvisibility crosswalks should be installed using the continental "bar" design to alert motorists of approaching crosswalks.

ADA compliance for curb ramps at each crosswalk should be reviewed and crosswalks that do not meet the requirements should be changed to create a safer walking route as well as accommodate all students. Pedestrian Crossing signs should be visible to alert motorists of crosswalks ahead as well as help to alert motorists to slow down when approaching them.

The Borough should restripe the bicycle lanes from Auburn to Harris Lane, which were removed when North Main Street was recently repaved. The Borough should also consider extending this bicycle lane along North Main Street to the intersection of East Ave or Lotus Ave to enable safe bicycle travel through the Borough.



Lack of high-visibility crosswalks and bicycle lane needing re-striping on Main Street



## Minor Corridor: East Grant Street (West Grant Street & Lee Street)

East Grant Street is a recommended minor corridor for students living northwest of Woodstown Middle School and Mary S. Shoemaker School due to its low speed limit and continuous sidewalks on both sides of the corridor. West Grant Street and Lee Street are two minor arterial streets along which students reside. Both streets merge into East Grant Street at the intersection of North Main Street and East Grant Street.

### **Roadway Characteristics**

East Grant Street is a two lane road with continuous sidewalk on both sides, with one area of disconnected sidewalk just west of the intersection of East Grant Street and Route 40. On-street parking is permitted on both sides of the road.

West Grant Street and Lee Street are similar roads in that they both are two lane roads and are in a residential area. West Grant Street has intermittent sidewalk discontinuation. There is "no parking on any street" from 2:00AM-5:00AM to deter criminal activity.

## Transportation Concerns

There is no high-visibility crosswalk across

North Main Street from West Grant Street to East Grant Street as well as ADA compliant curb ramps, which is a hazard to students crossing North Main Street. North Main Street is a high traffic volume and high speed road.

Discontinued sidewalk along West Grant Street (west of North Main Street) and East Grant Street (east of Route 40 on the west side of the road) can make hazardous conditions for students walking and bicycling to and from Woodstown Middle School.

25MPH (Not Posted)	
2, 8-12'	
2, 7-8'	
Intermittent on both sides	
At major intersections, standard style	
None	
"Warning, zero tolerance for speeders", "No Parking, any street from 2AM-5AM"	
None	
At the intersection of East Grant	
Street and North Main Street	
Yes	
None	
None	
Intermittent tree canopy cover	
Some	
None	
Consider installing high-visibility	
crosswalk across North Main Street	
to East Grant Street. Install ADA	
compliant curb ramps at the	
intersection of North Main Street	
and East Grant Street	



### **Recommendations**

Install a high-visibility crosswalk across North Main Street as well as install ADA compliant curb ramps at the intersection of East Grant Street and North Main Street. Flashing pedestrian crossing signage and in-street pedestrian crossing signage can help to make drivers aware of students crossing and will also reduce traffic speed. Trees should be trimmed so as to not obstruct pedestrian signage.

Install missing sidewalk along West Grant Street to create a connected travel corridor for students to use. Review crosswalks along West Grant Street to make sure they are ADA compliant.



Crosswalk at East Grant Street and North Main Street Obstructed pedestrian crosswalk signage



## Minor Corridor: Elm Street (County Road 602)

Elm Street is a recommended travel route for students that attend Woodstown Middle School because it facilitates travel to both Broad and Richman Streets, which were observed as means for students, residing south of the school, to access campus. Students are required to cross and travel alongside Elm Street on their daily travels to and from Woodstown Middle School.

## **Roadway Characteristics**

Elm Street is a two lane road with a posted speed limit of 35 MPH. The cross section of the street varies. Between North Main Street and School Lane, Elm Street features two bike lanes. The roadway narrows slightly west of School Lane and the bike lanes are discontinued leaving wider travel lanes.

Crosswalks are provided at North Main Street, Broad Street, Lamplighter Lane, School Lane and Candlelight Drive. All but the crosswalks located at School Lane are standard crosswalks. The crosswalk at School lane is a higher visibility zebra styled crosswalk.

## Transportation Concerns

Speeding appeared to be a concern on Elm Street. This was especially prevalent at the far western end of the street, where it intersects with East Avenue (Route 40). The wide curb radius allows vehicles, travelling west on Route 40, to turn onto Elm without slowing down. A sign reminding motorists to turn off their turn signals further exemplifies the gradual nature of the turn. A crossing

Speed Limit	35 MPH	
Travel lanes	2, 12' ; 2 16'	
Parking lanes	None	
Sidewalks	Sidewalk gaps throughout corridor	
Crosswalks	Standard crosswalks at North Main	
	Street, Broad Street, Lamplighter	
	Lane and Candlelight Drive. Zebra	
	crosswalk at School Lane	
Signals	North Main Street, no pedestrian	
	countdown signal	
Signage	Crosswalk signs	
Curb extensions	None	
<b>Crossing Guards</b>	North Main Street and Candlelight	
	Drive	
Ped-Scale		
Lighting	None	
Bicycle lanes	2, 5' standard bike lanes between	
	North Main Street and School Lane	
Bicycle signage	"Bike Xing" pavement markings	
Street trees	Intermittent tree canopy cover	
Driveways	Frequent west of Lamplighter Lane	
Median	None	
Suggested	Add high-visibility crosswalks at	
Improvements	minor travel corridor crossings,	
	narrow travel lanes, extend bike	
	lanes, provide sidewalk extensions	
	around obstructions	

guard stationed at Candlelight Drive cited vehicle speed as a significant safety concern on this part of Elm Street. The travel lanes are also very wide between School Lane and Route 40, which could further encourage speeding. Students were also observed bicycling along this stretch of Elm Street, where there are no bike lanes.

Sidewalks along Elm Street are narrow and frequently obstructed by utility poles, tress, mailboxes, etc. There are also frequent sidewalk gaps. Most of these gaps are located in front of private residences. The stretch of Elm Street between Lamplighter Lane is especially problematic, lacking sidewalks on both sides of the roadway. Students must walk in the narrow five foot bike lane. On



the north side, the location of gravesites in the cemetery most likely prevents any future sidewalk installation. Across the street, there is a sidewalk gap in-front of three residential units. There is also a small sidewalk gap at the northeast corner of Richman and Elm. Many students use Richman to access Woodstown Middle School from Elm Street.

## **Recommendations**

Traffic calming interventions should be explored along Elm Street to slow traffic exiting off Route 40. Narrowing travel lanes may be an effective and simple solution to reduce speeds. It is estimated that travel lanes vary between 12 and 16 feet along Elm Street. The American Association of State Highway and Transportation Officials' publication A Policy on Geometric Design of Highways and Streets (AASHTO Green Book) considers 10 foot travel lanes an acceptable minimum lane width. There has been no general indication that 10 foot travel lanes have had any noticeable effect on roadway safety, compared to 11 foot or 12 foot lanes, and in fact often slow traffic, improving bicyclist and pedestrian safety.<sup>1</sup> Additionally, narrowing travel lanes down to 10 or 11 feet will allow more space available to dedicate to bicyclists. The existing bike lanes on Elm Street could be extended the entire length of the roadway.

High-visibility bar-style crosswalks and ADA curb ramps should be installed to facilitate pedestrian crossing of Elm Street. This style of crosswalk is especially appropriate at the crossings located at Broad Street and Candlelight Drive.

In areas of sidewalk obstruction, sidewalks should be extended outward to provide the necessary space to allow pedestrians and individual in wheelchairs adequate passage. As shown below, Woodstown has done this in certain areas. The practice should be consistent along Elm Street.



Sidewalk Extension around Utility Pole on Elm Street

<sup>&</sup>lt;sup>1</sup>American Association of State Highway and Transportation Officials' (AASHTO) *Guide for the Development of Bicycle* Facilities, 2012, Fourth Edition



## Minor Corridor: Bailey Street, Old Salem Road, Alloway Road

Bailey Street, Old Salem Road, and Alloway Road are recommended travel routes for students that attend Mary S. Shoemaker School and Woodstown Middle Schools because they are essential routes for a large number of students living in high-density housing complexes, including Freedom Village on Alloway Road (CR 603) and Hillcrest Apartments on Bailey Street (CR 616). Additional students travel along Old Salem Road (CR 678) from their homes. Students living on this street and Liberty Avenue travel down Alloway Road or Old Salem Road to the six point intersection.

### **Roadway Characteristics**

Bailey Street, Old Salem Road, and Alloway Road converge at a six-point intersection at the edge of Woodstown Borough, approximately three quarters of a mile to one mile walking distance from Woodstown Middle School and Mary S. Shoemaker Elementary School, respectively.

Speed limits on all three county roads are high as they approach the intersection, and traffic volumes are also high.

Speed Limit	35 MPH	
Travel lanes	2, 10 - 18'	
Parking Lanes	Alloway Road: 2, 7'. Other parking	
	lanes not present or unmarked.	
Sidewalks	Significant interruptions on Bailey	
	Street, Old Salem Road, and Alloway	
	Rd. Additional missing segments on	
	Lotus Avenue on south side.	
Crosswalks	None	
Signals	None	
Signage	No pedestrian or school signage	
Curb extensions	None	
<b>Crossing Guards</b>	Alloway Road and Mill Street	
Ped-Scale		
Lighting	None	
Bicycle lanes	None	
Bicycle signage	None	
Street trees	Few	
Driveways	Some	
Median	None	
Suggested	Add high-visibility crosswalks across	
Improvements	6 point intersection. Connect missing	
	sidewalk segments along Old Salem	
	Road. Install flashing pedestrian	
	signage at 6 point intersection.	

### Transportation Concerns

Currently, there are significant sidewalk gaps on both sides of Bailey Street between Locust Avenue and Hillcrest Drive, forcing students to walk in the shoulder on a 35 mile-per hour segment of a high-traffic road (6,297 AADT).

Recently, sidewalk segments were completed at the six point intersection and ADA curb ramps were installed. However, the crossing of Bailey Street at Old Salem Road was removed, and ADA curb ramps were not installed to facilitate this crossing. Several students were observed crossing this intersection approach despite the lack of curb ramps or crosswalk, and the crossing guard reported he is unable to prevent students from doing so. Many Elementary and Middle School students living along Liberty Avenue, Alloway Road, and Old Salem Road which all have missing sections of sidewalk along the corridors, walk on the shoulder or in the street which creates hazardous conditions for students.



Crosswalks at the six point intersection have not yet been striped and there is no pedestrian crossing signage. Crosswalks across Alloway Road at Liberty Avenue also lack striping and pedestrian crossing signage, creating an unsafe crossing condition for students traveling to school from Liberty Avenue.

### **Recommendations**

The sidewalk network should be completed by adding sidewalk segments where missing, especially along an approximately 200' section of Bailey Street and in front of houses on Old Salem Road.

High-visibility bar-style crosswalks should be installed at all crossings of the six point intersection and across Alloway Road at Liberty Avenue. Serious consideration should be given to installing a crosswalk and ADA compliant curb ramps across Bailey Street at Old Salem Road (CR 678) to restore this former crosswalk. Students who continue to cross at this location and the decision to remove the former crosswalk at this location may pose a safety concern.

Pedestrian signage and/or flashing pedestrian warning devices should be installed at the six point intersection to enhance student safety. Additional pedestrian crossing and warning signage should be installed at Alloway Road and Liberty Avenue. This signage would alert drivers to the presence of students crossing at these busy, high-speed roads.



Student crossing at unmarked crossing with no ADAramps, Old Salem Road and Bailey Street

volume corridor



## **Additional Corridors**

For the following minor student travel corridors, the Borough should follow the overall recommendations listed at the outset of this chapter:

- Marlton Road
- Dickinson Street
- Broad Street
- Richman Street
- Candle Light Drive
- Lantern Drive

Where necessary, the Borough should install sidewalks to remove interruptions in the sidewalk network, install high-visibility crosswalks, install ADA curb ramps, and redirect sidewalk paths to avoid obstructions such as trees and utility poles.

## **Summary**

The recommendations that have been suggested for each major and minor corridor observed during the walking audit should be examined further prior to implementation.

In summary, the above recommendations for each major and minor corridor are based on existing conditions observed during the walking audit and information obtained from school and municipal representatives. Many of these recommendations can be implemented in a short time frame, while others will take more time to implement. These recommendations should be reviewed by the municipal engineer to ensure design standards and regulations are implemented. Funding opportunities are available for infrastructure improvements and are discussed in Chapter 6. In addition to these improvements, Woodstown-Pilesgrove School District should also implement educational programs to ensure children and parents know how to be safe pedestrians and bicyclists, as discussed in the following chapter.



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## **5. NON-INFRASTRUCTURE RECOMMENDED ACTIONS**

The following are the recommended non-infrastructure actions suggested to achieve the goals of the Woodstown-Pilesgrove School District Travel Plan by addressing the 5 E's of Safe Routes to School: Education, Encouragement, Enforcement, Engineering, and Evaluation.

## Education

Education efforts are an important component in developing a sustainable Safe Routes to School Program and to relieve pedestrian and bicycle travel issues. These actions can help change a community's perception of how children should travel to and from school safely. They will also ensure that children receive proper instruction on walking and bicycling while raising community awareness of the benefits of walking and biking. Table 5 details the recommended Education Actions.

Woodstown-Pilesgrove School District, in the past, has conducted multiple walk to school events, pedestrian safety presentations, a poster contest, and a bike rodeo.

Education Actions	Responsibility	Time Frame
Creation and distribution of	Woodstown-Pilesgrove School	Ongoing
educational materials to students,	District/Cross County Connection	
parents/guardians and community	TMA/NJSRTS Program	
members		
In-class education on safe walking	Woodstown-Pilesgrove School District	Annually
practices, along with health and	/Cross County Connection TMA/ The	
environmental benefits	Brain Injury Alliance of New Jersey	
Inclusion of SRTS elements in Teacher	Woodstown-Pilesgrove School District	Annually
and Student Handbooks		
Participate in New Jersey's SRTS	Woodstown-Pilesgrove School District	Ongoing
Webinar Program		

## **Table 5: Education Actions**

Cross County Connection and the Alan M. Voorhees Transportation Center will provide safety education and outreach materials for distribution to students, parents and school staff. These materials may be circulated at parent-teacher meetings, school walking events, in-class, or included with municipal information. Pedestrian and bicycling safety education should also be addressed at parent-teacher meetings as well as safe driving habits. Inclusion of parents in educational programming is a good way to reinforce safety education at home.

Woodstown-Pilesgrove School District should continue to take advantage of Cross County Connection's 3rd-4th Grade Pedestrian Safety Program on an annual basis. Additional information about the Pedestrian Safety Program is available on Cross County Connection TMA's website: (<u>http://driveless.com/TransportationPlanning/SafeRoutes.html</u>).



Through active participation, students will learn about the benefits of walking, ways to avoid potential hazards while walking, how to properly understand and obey pedestrian signals, cross roadways safely, and understand traffic flow. Many schools in southern New Jersey use the Pedestrian Safety Program as a building block for their SRTS programs.

To supplement Cross County Connection's 3rd-4th Grade Pedestrian Safety Program, it would be beneficial to the health and well-being of students from Woodstown-Pilesgrove School District to also take advantage of other programs available to schools, which teach children safe bicycling and walking, such as the Brain Injury Alliance of New Jersey (<u>http://bianj.org/</u>).

## Encouragement

Encouragement actions promote walking and biking to school through programs such as walking school buses, satellite walking events, a Golden Sneaker Award, and other activities that generate excitement about walking and biking. These programs are essential to building the momentum necessary to significantly change school travel habits. Woodstown-Pilesgrove School District should hold a walk to school event once a month to encourage more students to walk and bike to school.

Woodstown-Pilesgrove School District has coordinated walk to school events through their SRTS Program in the past and should continue conducting walk to school events within the Borough to encourage students and parents to walk and bike to school more. Woodstown-Pilesgrove School District should hold a Bike Rodeo for children within the community to help teach the fundamentals of safe bicycling to and from school and also within the community this spring. Some of the programs and events that are held and should be held include the following list in Table 6.



<b>Encouragement Actions</b>	Responsibility	Time Frame
Walk to School Event	Woodstown-Pilesgrove School	Monthly
	District	
Walking School Bus (WSB)	Woodstown-Pilesgrove School	Fall 2016
Pilot Program	District /Cross County	
	Connection TMA	
Bicycle Rodeo	Woodstown-Pilesgrove School	Fall 2016
	District /Cross County	
	Connection TMA	
Participation in International	Woodstown-Pilesgrove School	Annually in October
Walk to School Day	District	
Participation in International	Woodstown-Pilesgrove School	Annually in May
Bike to School Day	District	
Poster Contest	Woodstown-Pilesgrove School	Fall 2016
	District	

### **Table 6: Encouragement Actions**

Below are events and presentations Woodstown-Pilesgrove School District has conducted in the past and events that they should conduct (Pilot) to further their Safe Routes to School program.

## Walk to School Day

To further promote walking and bicycling, Woodstown-Pilesgrove School District should continue to participate in International Walk to School Day and International Bike to School Day, which are held in the months of October and May, respectively. Mary S. Shoemaker School has held two walk to school days on May 21, 2015 and October 29, 2015. School events may be registered online by visiting www.walkbiketoschool.org. Woodstown-Pilesgrove School District should hold a walk to school event in April which is New Jersey's Walk and Bike to School Month to continue their program. International Walk to School Day in October can act as the official annual kick off to the schools' SRTS Programs.

## Pedestrian Safety Presentation by Cross County Connection

Students are taught the do's and don'ts of properly crossing a street using a mock streetscape including a road and crosswalk. Students are taught sign recognition and other important pedestrian skills to use when walking to and from school.

## Poster Contest by Cross County Connection

The Poster Contest is held after conducting the Pedestrian Safety Presentation. The purpose of the contest is to reinforce the safety lessons taught to 3rd and 4th grade students that participated in the Pedestrian Safety Program.



## Golden Sneaker Award

A Golden Sneaker Award Program is an incentivized contest that can be run in various ways. Some schools tally each student that walks or bikes to school daily and at the end of each month the homeroom with the most walking/bicycling students will earn the "Golden Sneaker." A Golden Sneaker Award can be created by spray painting an old running shoe gold and mounting it on top of a trophy stand. Incentive programs are a good way to keep the momentum going with SRTS programs.

### Walking School Bus

A walking school bus is a group of children walking to school along a fixed route with one or more adults. It is suggested that Woodstown-Pilesgrove School District develops a pilot program during the school year. By doing so, younger students will be given the opportunity to learn about safe pedestrian practices, while familiarizing themselves with their neighborhoods.

### Bicycle Rodeo

Cross County Connection can assist the school in the planning of a bicycle rodeo on school grounds. Bicycle rodeos are used to teach a large group of schoolchildren safe bicycling practices, such as how to fit a helmet, signal for turns, and come to quick stops.



## Enforcement

Enforcement of safe and lawful travel behavior around schools, on all travel corridors and throughout the Borough is important to ensuring a safe walking environment for children. Table 7 shows enforcement actions that can be conducted to increase pedestrian and bicycle safety around the school.

## **Table 7: Enforcement Actions**

Enforcement Action	Responsibility	Time Frame
Speed Enforcement	Woodstown Borough	Targeted + Ongoing
	Police	
Stop for pedestrians in crosswalks	Woodstown Borough	Targeted + Ongoing
enforcement	Police	
Jay-walking midblock	Woodstown Borough	Ongoing
	Police	
Parking Enforcement	Woodstown Borough	Ongoing
	Police	
Clear debris from sidewalks and obstructed	Woodstown Borough	Ongoing
road signs	Public Works	

## Engineering

Engineering recommendations in this Travel Plan are discussed in Chapter 4 and shown on Map 11. These recommendations focus on safety improvements throughout the study area surrounding the school. These recommendations are general in nature and should be examined further by engineering staff. Any improvement would require appropriate engineering analysis and would be subject to appropriate design guidelines and regulations, such as the Manual on Uniform Traffic Control Devices (MUTCD).



## **Evaluation**

Determining participation in walking and bicycling programs and identifying parent concerns are an important part of the SRTS program. Evaluating these factors allows school staff to determine the success of their SRTS activities and how they might prioritize and modify their efforts to encourage more children to walk and bike to school. Table 8 shows evaluation actions that will help Woodstown-Pilesgrove School District to assess the successfulness of their Safe Routes to School program and on what to improve.

<b>Evaluation Action</b>	Responsibility	Time Frame
Student Troval Tally	Woodstown-Pilesgrove School	2016-2017 School Year;
Student Travel Tally	District	Quarterly
	Woodstown-Pilesgrove School	2016-2017 School Year;
Parent Survey	District Cross County Connection	Annually
	ТМА	
	Voorhees Transportation Center	

## Table 8: Evaluation Actions

Woodstown-Pilesgrove School District conducted student travel tallies in the spring of 2016. Student travel tallies are held in-class by school staff to determine how children arrived at school that day. Tallies should be held at regular intervals to determine the impact of SRTS activities in student travel choices (usually held week long to gain accurate data). Tallies should also be compared quarterly to measure success. Parent surveys may be sent home with children or distributed to parents electronically to determine parent attitudes and concerns about children walking or biking to school.



## 6. CONCLUSION

Woodstown Borough is committed to increasing the number of children who walk and bike to school through safety improvements and programs that encourage walking/bicycling and educate students about safety procedures. The Borough currently addresses child walking safety by providing crossing guards at busy intersections and providing a Safe Routes to School Program that includes education and encouragement activities as well as many good pedestrian safety infrastructure features. The Woodstown-Pilesgrove School Travel Plan was developed to address the school district's interest in improving walking and bicycling programs, and the continued concerns about existing and potential safety issues due to speeding, road crossings and pedestrian infrastructure gaps in the community it serves.

## Next Steps

Implementation of this plan and the sustained success of any effort to increase walking and bicycling to school will require continued partnership among local and regional organizations. Infrastructure improvements must be employed alongside hands-on education and encouragement programs to maintain momentum towards achieving the goals set forth by the SRTS Team. The following entities should undertake the actions listed below and outlined in more detail through this document to implement the Woodstown-Pilesgrove School Travel Plan.

- Woodstown Borough should continue to pursue SRTS Infrastructure grants and other grants administered by NJDOT and the South Jersey Transportation Planning Organization (SJTPO) to implement recommendations identified in Chapter 4, such as repainting crosswalks, installing additional high-visibility continental crosswalks, pedestrian signage, installing sidewalks and other pedestrian and bicycle safety improvements.
- Woodstown-Pilesgrove School District, Cross County Connection, and the Brain Injury Alliance should continue to facilitate pedestrian safety education and encouragement activities.
- Woodstown Borough should continue enforcement efforts and consider participating in the pedestrian safety decoy program to increase compliance with New Jersey's "Stop and Stay Stopped" law. Obstructions to pedestrian facilities and signage should be removed.
- Woodstown-Pilesgrove School District, Cross County Connection, and the Voorhees Transportation Center should continue evaluation efforts, such as conducting student travel tallies and parent surveys, in order to modify the SRTS program, where necessary.



## **Funding Resources**

Implementation of engineering improvements can be expensive. Fortunately, there are funding programs at the state and federal level dedicated to assist with the implementation of projects that would improve the safety of Woodstown-Pilesgrove School District students walking and bicycling to school. These funding programs are competitive, have deadlines and the application process requires time to complete. In addition, the programs listed below receive far more funding requests than can be obligated. Cross County Connection is available to provide assistance in determining appropriate funding sources and preparing grant applications.

The funding programs listed below are provided as a general guide, and are not an exhaustive list of available funding sources. For more information on a specific program, please contact the granting agency or refer to the grant program guidelines found on the program websites.

## SAFE ROUTES TO SCHOOL (SRTS) INFRASTRUCTURE PROGRAM

Federal funding is available for SRTS projects that improve the safety of children walking or biking to school. The program is administered through NJDOT. Eligible projects may include the planning, design, construction or installation of sidewalks, crosswalks, signals, traffic-calming and bicycle facilities within two miles of an elementary or middle school (K-8). Local and regional governments, school districts and individual schools are eligible to be project sponsors and receive direct funding.

## SURFACE TRANSPORTATION PROGRAM (STP) SETASIDE

This federal funding is set aside to foster more livable communities and promote alternative modes of transportation such as biking and walking. Eligible activities include bikeway construction, acquisition of right-of-way for bikeways and many other projects. Activities funded by the STP Setaside were previously funded by the Transportation Alternatives Program (TAP) and the Transportation Enhancements (TE) Program in previous federal transportation bills. A key feature of the STP Setaside Program in the current federal transportation bill (FAST Act) is the funding eligibility for projects dedicated to the construction, planning and design of infrastructure projects that provide "safe routes for non-drivers" which includes children, seniors and disabled persons. While NJDOT has historically provided the 20% match required under federal transportation legislation, their level of participation is not guaranteed. Eligible project sponsors for STP setaside funds include local and regional governments, transit agencies, school districts and individual schools.

## MUNICIPAL AID PROGRAM

Municipal Aid is a state-funded program administered by NJDOT for roadway and bridge improvements, which may include the installation of bicycle and pedestrian facilities. Each county is appropriated funds for their constituent municipalities based on a formula. Municipalities must submit applications detailing a potential project to their local NJDOT District Office.

School districts and individual schools are not eligible to apply for these funds directly, but they should encourage their municipal government to apply for these funds and direct them towards improving the bicycle and pedestrian safety around their schools.



For more information regarding these three funding programs contact:

New Jersey Department of Transportation (NJDOT) Website: http://www.state.nj.us/transportation/business/localaid/ District Manager, NJDOT 1 Executive Campus Route 70 West, 3rd Floor Cherry Hill, NJ 08002 Phone: 856-486-6618 Fax: 856-486-6771

## **Summary**

The Woodstown-Pilesgrove School District Travel Plan was created through the collaboration of the Woodstown Safe Routes to School working group and Cross County Connection TMA. This Travel Plan was undertaken to address Woodstown-Pilesgrove School District's interest in improving/incorporating new pedestrian infrastructure to create a safer walking and bicycling environment for students to get to and from school. The Travel Plan outlines the potential safety issues and concerns regarding pedestrian infrastructure within close proximity to Mary S. Shoemaker School and Woodstown Middle School, and offers recommendations to address the areas of concern.

The sustained success of any effort to increase walking and bicycling to school will require continued partnership among local and regional organizations. Infrastructure improvements must coincide with hands-on education and encouragement programs to maintain momentum towards achieving goals set forth by the Safe Routes to School working group. Woodstown-Pilesgrove School District and Woodstown Borough have demonstrated through current and past efforts, that they are committed to creating a community that promotes healthy and active lifestyles for students, as well as providing a safe environment for walking and bicycling.



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## Appendix A

## Mary S. Shoemaker Arrival/Dismissal Procedures CARPOOL/WALKERS GUIDELINES

In the morning, carpool drop off time is from 7:30am – 7:50am in the main entrance loop. Students should not be dropped off to school before that time as there will be no supervision. DO NOT DROP YOUR CHILD OFF BEFORE 7:30 EACH MORNING. The busing area is designated at the loop near the Multi-Purpose Room (MPR). Staff is available to assist your child to and from the vehicle so you can remain in the driver's seat. Parents are urged to remain in their vehicles so the line can keeping moving. Many parents have to head off to work and we want to ensure the safety of all children. There are two exiting areas for our walking students; parents may wait at these areas to pick up their children: Multi-Purpose Room bike rack, Woodstown Middle School walkers (exit near the first grade bike rack). Parents are responsible for their children once they cross the bridge area and are dropped off by staff.

## Morning Carpool Arrival (7:30am - 7:50am):

The main entrance (large horseshoe) in the front of the school is utilized for carpool. Please create a carpool line alongside of East Millbrooke Avenue behind the sign (carpool starts here), near the tennis courts. At 7:30 am, a staff member will signal vehicles to enter the carpool loop. While there may be days when you may need to assist your child (i.e. seatbelt, large project, etc.), we ask parents to remain in their vehicles, if possible. Our staff members will assist the students into the school building. The school buses will utilize the multipurpose room entrance (small horseshoe) to safely unload the students. Parents are asked not to park along side of the street for drop off or pick up. You will be asked to move and kindly join the line. Also, please do not turn left into the loop in front of other parents who have been waiting patiently in the carpool line. Children will enter the school and report either to the multi-purpose room or the cafeteria for breakfast like they did last year. We will take our time at first settling children into their breakfast routine and our morning routines. Children will have options to play outside or inside in the morning. At 7:45am a warning bell will sound and the children will prepare to go to their homeroom classes.

## Morning Walking Arrival:

If your child is walking to school, the students are to arrive at 7:30am and enter the building near the Art room, or the first grade wing and report to the multi-purpose room or cafeteria.

## Afternoon Routine:

2:30 pm – (SACC) – Students who are enrolled in SACC will check in with SACC personnel at either the cafeteria or multipurpose room.

2:33 pm – (Bus students) – The bell will sound and students will walk to their buses that will be located in the small horseshoe loop near the Art room. Staff will assist students to their proper location.



2:35 pm (Carpool students) – Students will be dismissed via the main entrance of the school (large horseshoe) and board their vehicles. Please follow the same procedures established for the morning carpool. Vehicles are to wait behind the sign near the tennis courts until approximately 2:35pm and then enter the carpool loop. Mr. Danner will signal when it is clear to enter the loop. When releasing the children, our staff will ask for parent identification if we do not recognize you. Please do not be offended with this procedure.

2:35 pm (Walking students) – Headed home past Woodstown High School/Woodstown Middle School- At dismissal, the teachers will send the students to a designated location inside the school (near the first grade classrooms) and our staff will walk with the students to the bridge area of the Woodstown High School/Middle School grounds. Once the students reach the bridge area, it is the responsibility of the parent to instruct how the child is to proceed home. The MSS staff will not be supervising the children once they are dropped off at the bridge area.

Headed home via East Millbrooke -Parents who wish to have their child walk via East Millbrooke should wait for their child on the side of the multi-purpose room near the bike rack. The staff will dismiss the students to a designated location in the school (near the music room) and our staff members will escort the children to the bike rack area outside.



## **Appendix B**

#### Chapter 41 BICYCLES, ROLLER BLADES AND SKATE BOARDS

#### §41-1. Definitions.

§ 41-2. Prohibited activities.

#### §41-3. Curfew.

§ 41-4. Violations and penalties.

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[HISTORY: Adopted by the Mayor and Council of the Borough of Woodstown 5-11-1896 as Ord. No. 20. Amended in its entirety 4-28-98 by Ord. No. 528. Further amendments noted where applicable.]

#### GENERAL REFERENCES

Police Department — See Ch. 21. Vehicles and traffic generally — See Ch. 87.

Be it ordained by the Mayor and Council of the Borough of Woodstown, in the County of Salem and State of New Jersey:

#### § 41-1. Definitions.

BICYCLE — Any two (2) wheeled vehicle having a rear drive wheel which is solely human-powered and having a seat height of twenty-five (25) inches or greater when the seat is in the lowest adjustable position.

ROLLER BLADE — Any roller skate, inline skate or other equipment worn on the feet and used for recreation or transportation purposes.

SKATE BOARD — Any form of horizontal platform mounted on wheels and used for recreation or transportation purposes by an individual positioned on top of the platform and propelled by gravity or human power.

#### § 41-2. Prohibited activities.

It shall be unlawful for any person to ride or use a bicycle, roller blades or a skate board on the sidewalks within the Borough of Woodstown in those commercial districts identified as C-1 and L-C on the Official Zoning Map for the Borough of Woodstown. These districts include the sidewalks located adjacent to the following streets: West Avenue, Green Street, North Main Street, South Main Street, East Avenue, West Maple Street, East Maple Street, Maple Court and Bowen Avenue t the extent these streets are included within the prohibited zones.

No roller blades, bicycles or skate boards may be utilized on any private property without the express consent of the owner or occupant of said property.

#### §41-3. Curfew.

No roller blades nor skate boards may be used within the Borough of Woodstown at any time between one (1) hour after sunset and sunrise of the following day. This section of the chapter shall not prohibit the use of skate boards and roller blades on private property when such use is with the express consent of the owner or occupant of said property.

#### § 41-4. Violations and penalties.

For a first violation of this chapter, the Municipal Court may impose a fine not exceeding five hundred dollars (\$500.), forfeiture of the roller blades, skate board or bicycle used in violation of this chapter, and may order community service. For a second or subsequent violation, all of the penalties available for the first violation may be imposed, however, the minimum fine shall be two hundred dollars (\$200.). The police are authorized to seize any bicycle, skate board or roller blades as evidence pending a final disposition of the charges.

Chapter 41 BICYCLES, ROLLER BLADES AND SKATE BOARDS Published by ClerkBese \$2016 by ClerkBese. No Cleim to Original Government Works.



## **Appendix C**

#### Chapter 78 STREETS AND SIDEWALKS

ARTICLE I

### Paving; Grading; Construction of Service Mains

- § 78-1. Laying out, paving and grading of streets prior to lot development.
- § 78-2. Utility mains laid prior to paving.
- § 78-3. Street construction: materials and specifications.
- § 78-4. Placement of utility service lines.
- § 78-5. Construction, repair and replacement of sidewalks and driveway aprons.
- § 78-6. Construction, repair and replacement of curbs.
- § 78-7. Violations and penalties.

### ARTICLE II

### Curbs, Gutters, Driveway Aprons and Sidewalks

- § 78-8. Curbs, driveway aprons and sidewalks required.
- § 78-9. Location indicated on plot plan.
- §78-10. Lines and grades.
- §78-11. Reserved.
- § 78-12. Repair or construction prior to certificate of occupancy.
- § 78-12.1. Appeals.
- §78-13. Violations and penalties.

#### ARTICLE III Street Excavations and Openings

- § 78-14. Prerequisites to opening streets.
- §78-15. Written permit required.
- §78-16. Duties of permittee.
- §78-17. Bonds.
- §78-18. Fees.
- § 78-19. Duties of Superintendent of Public Works and Borough Clerk.
- § 78-20. Responsibility for damages.
- § 78-21. Violations and penalties.

[HISTORY: Adopted by the Mayor and Council of the Borough of Woodstown: Art. I, 6-25-51 as Ord. No. 143; Art. II, 6-10-96 as Ord. No. 216; Art. III, 11-27-78 as Or No. 305. Sections 78-7 and 78-13 amended at time of adoption of Code; see Ch. 1, General Provisions. Other amendments noted where applicable.] le.]

### GENERAL REFERENCES

Brush, hedges, weeds and obnoxious growth — See Ch. 43. Land development — See Ch. 67. Littering — See Ch. 68. Shade trees — See Ch. 76. Underground utility services — See Ch. 85.

### ARTICLE | Paving; Grading; Construction of Service Mains [Adopted 6-25-51 as Ord. No. 143]

### § 78-1. Laying out, paving and grading of streets prior to lot development.

No lot development shall be permitted until adequate provisions have been made for the laying out, grading and paving of all streets in the development.

## § 78-2. Utility mains laid prior to paving. [Amended 5-27-97 by Ord. No. 513]

All utility mains, including gas, water, sanitary and storm sewers, shall be laid prior to paving.

## § 78-3. Street construction: materials and specifications. [Amended 5-27-97 by Ord. No. 513]

All streets shall be constructed of soil aggregate I-5 to a depth of eight (8) inches with a two (2)-inch approved hard asphalt concrete surface.

## § 78-4. Placement of utility service lines. [Amended 5-27-97 by Ord. No. 513]

All water and gas utility service lines shall be laid to the curblines on said streets. Sanitary sewer lines shall be at or near center line of said streets. Electric, telephone and cable TV shall be behind the curblines of said street.

§ 78-5. Construction, repair and replacement of sidewalks and driveway aprons. [Amended 11-8-54 by Ord. No. 158; 6-28-94 by Ord. No. 475; 5-27-97 by Ord. No. 513; 4-9-02 by Ord. No. 564; 7-13-04 by Ord. No. 599]



- A. Fortland concrete coment sinewalks shall be kid to a depth of four (4) inches with a witch of four (4) feet. Except at point of vehicular crossings, where they shall be at least siz (6) inches thick. This also applies to driveway across.
- Exception: In certain areas of the borough, sidewalks vary in width, replacement or installation of sidewalks shall meet the disting widths of the bordering properties.
- B. Sidewaks shall have a soft broom finish so as not to be so smooth that they are slippery when wet. Expansion joints of protomod objuntious-imprograted fiborboard shall be placed at property inex and is least every twenty (20) feet with a broak joint avery four (4) feet. Saw use are not to be used in place of break joints.
- C. All Portland concrete cement outsil yield a Compressive strength of four thousand (4,000) pounds or more in twenty-eight (28) days from the date it has been lai¢
- D. All now and replacement sidewalks and driveway aprons are to be constructed of concrete cement of four unsused (4,000) pound mix. No new brick or biominous concrete storwalks are allowed. State sidewalks are not allowed and must be removed.

Exception: In certain areas of the borough, slockwalks that are constructed of brick may be replaced or repained with hrink so long as they are installed according to the Borough Engineer's specifications. Remove the brick, compact the ground, add four (4) inches of Interquarter (3/4) inch been stone and compact. Add two (2) inches of stod, compact the brick into the sand and top the brick with sand to fill the joints. [Amended 7 13 04 by Ord. No. 599]

- E For all new construction, sidewalks shall be located no less than threa (3) feet from behind the outpline to provide for reasonable access to water maters and connections.
- F. All sidewalks shall have a grade level with the top of the outh and an indine of one quarter (1/4) inch por (out over the four (4)-foot widon.
- G. All new construction, sale or transfer of property titles will require handkapped access ramps to be installed at all intersections to meet ADA requirements. landik speed access ramps shall be constructed of Portland concrete cerrent of four thousend (1,000)-pound mix only.
- H. Good condition of existing sidewelks, driveway borons, curbs and handicapped access ramps shall require that the particular interovement not be exclined, irregular, unlevel or uneven, scaling or rough aggregate surface or displaced in such fishion as to constitute a High tripping hazard or lead to unreasonable pretrature deterioration. (Amended 7-13-04 by Ord. No. 599)
- All new construction, repair and replacement of existing curbs, sidewalks, driveway aprons and handicapped apress ramps shall be authorized by the Superingendent of Public Works prior to the start of work. The Superintencent of Public Works or his designate will inspect the formwork and finish work to ١. . ensure the work meets the borough's requirements. [Added 7-13-04 by Ord. No. 599]

§ 78-6. Construction, repair and replacement of curbs. [Amended 6-28-94 by Ord. No. 475; 5-27-97 by Ord. No. 513; 4-9-02 by Ord. No. 564]

Gurat shall be laid to a depth of twelve (12) inches below the finish grade of the street with an exposed face of six (6) inches. Top width of so (6) in ches and a bettom width of eight (8) inches as shown in Figure 4.1, lifted Concrete Cement Vartical Curb. Transverse joints of bituminous-impregneted fiberbaard shall be restalled at least every ten (10) feet. All curbs are to be of Portland concrete cement of icon thousand (4,000)-pound mix only. Slate curbs are not a lowed and must ine recursored.

Deseption: In certain areas of the borough, Portland concrute compart curb and gutter is utilized and all installation, repeir or replacement must be curb and gutter of Portland concrete cement of four thousand (4,000)-act nd mix only.

Exceptions in certain areas of the borough, Belgian block curb is utilized and all installation, repair or replacement must be matching Batgian block construction 218

Editor's Note: The figure referred to herein may be found at the end of this Article.

#### §78-7. Violations and penalties.

Violators of this Article shall be subject to a fine not exceeding five hundred of lars (SSCO) or imprisonment for a term not acceeding hinaty (90) days, or both Each day the violation continues shall constitute a separate violation.

> Figure 4.1 Concrete Centern, Vertical Curb

ARTICLE II Curbs, Gutters, Driveway Aprons and Sidewalks [Adopted 6-10-96 by Ord. No. 475] Editor's Note: Ordinance No. 599 amended the title of Article II to Include Driveway Aprons.



## § 78-8. Curbs, driveway eprons and sidewalks required. [Amended 6-28-94 by Ord. No. 475; 7-13-04 by Ord. No. 599]

No person or entity shall erect any dwolling, business or industrial structure on a for franking on a public street in the Borough of Woodstown without constructing curbs and sidewalks along the street frankage far the lot on which the building is structure in the event that the person or entity owns both sides of the street, then the street shall also be pavad.

#### 5 78-9. Location indicated on plot plan.

#### [Amonded 6-28-94 by Ord. No. 475; 5-27 97 by Ord. No. 513; 7-13-04 by Ord. No. 599]

Every applicant for a building permit shall indicate the location of curbs, driveway aprons, Kidewalks, hand cupped access ramps and any required pavement on the plot plan submitted.

#### § 78-10. Lines and grades.

### [Amended 5-28-94 by Ord. No. 475]

Before applying for a building period, each applicant governed by the provisions of this Article shall obtain from the Borough Engineer lines and grade, and all sidewalks, surbs and read improvements made shall be to the line and grade as established by the Borough Engine

#### 678-11. Reserved.

Editor's Note: Former Section 78-11, Sidewalk Construction Specifications, containing portions of Ordinance Nos- 475 and 513 was repeated by Ordinance No. 564

## § 78-12. Repair or construction prior to certificate of orcupancy. [Amended 11-13-89 by Ord. No. 420; 7-13-04 by Ord. No. 599]

- A. No certificate of occupancy for any building shall be granted by the Building Inspector or Housing Officer until and unless the construction of curbs, drivew aprons, pidewalks, handicapped access ramps and pavement. Scompleted and approved as to facation, grade, materials and we temarship after in by the Borough Engineer or the Superintendem of Public Works. (Amended 6-28-94 by Ord. No. 475; 5-27-97 by Ord. No. 513; 4-9-02 by Ord. No. 564) inspection
- B. No property which has frontage on a public streat and contains any dwelling, business or industrial structure may be sold on the transferred unless said No property which has frontage on a public street and contains any dwelling, business or industrial structure may be sold on the transferred unless said property has been inspected by the Housing Officer or the Superintendent of Public Works for curbs, drivway aprons, sidewalks, and hondicopoed access ramps. No permonent certificate of occupancy shall be issued units of the subject property shall be notified of the Housing Officer or the Superintendent of Public Works for curbs, drivway aprons, sidewalks, and hondicopoed access in accordance with the provisions of this chapter. The owner of the subject property shall be notified of the Housing Officer's decision of the decision of the Superintendent of Fuelic Works following his inspection. For those properties which the actes, drivway aprons, sidewalks and hondicopoed access ramps in alace, no perimenent certificate of accupancy shall be result units sold improvements are in good condition. Sold condition shall require that the astroider improvement not be transfer, inegular, unlose changes, seeling being to rough agreement the inspection such fashion astro contribute in the transfer improvement or installants in sections of the transfer improvement not be cransfer, inegular during the weat that repair, realizement or installants in required, a temporary certificate of occupancy may be issued for a period not to execute using (b) months it weequate provisions have been made for the contruction of the officiency must agree to the contruction of the officer or transfer of the initiation of the sidewalk, arrow or subject and bayer must agree to the contruction of installant on the sidewalk, arrow agreed to the Borough Hausing Officer prior to the section and provide agreed access rams. A keep of this agreement will be foregreed to the Borough Hausing Officer prior to the section and provide the issuence of the tensorie to the transfer of the issuence of the issuence of the tensory certificate. [Amended 5:27-07 by Get No. 513; 2-9-99 by Ord. No. 533; 4-902 by Ord. 533; 4-9-02 by Ord. No. 564]
- C. No property requiring the installation, repair or replacement of curbs, driveway aprons, sidewalks or handicapped acress ramp may be sold or totic transferred unces the property scall new been improved. Handicapped access ramps extinding from the sidewalk to the street an required for tode properties located at a hiersection. In the event that newsir, replacement or installation of any sidewalk, driveway aprovs, curb or landicapped access ramp is required, a lamporary confirmed and occurs raw of the event installation of any sidewalk, driveway aprovs, curb or landicapped access ramp is required, allowed with the access raw of the event. A first set of the installation of any sidewalk, driveway aprovs, curb or landicapped access ramp is required, additions or the root of the sidewalk in the required additions or the root access ramp. A required additions or the root aprovements are not completed prior to settlement, the selfer and bayer must agree to the cost, location and monor of the installation of the sidewalk, driveway aprove, one of handicapped access ramp. A cupy of this aprevent will be forwarded to the Berough Having Officer prior to the settlement and prior to the issuance of the tomparany consisting of the tomparany compared access ramp. A cupy of this aprevent will be forwarded to the Berough Having Officer prior to the settlement and prior to the issuance of the tomparany consisting of the tomparany to the settlement and prior to the settlement and prior to the settlement and prior to the settlement of the tomparany consisting of the tomparany consisting of the tomparany to the settlement and prior to the settlement and prior to the settlement of the tomparany consisting of the tomparany consisted to the settlement and prior to the settlement and prior to the settlement of the tomparany consisted to the settlement and prior to t occupancy: [Added 6-28-94 by Ord. No. 475; amended 4-9-02 by Ord. No. 564]
- D. The Sorough Engineer or the 5: perintendent of Public Works shall inspect all curb, driveway aprons, sidewalk and handicapped access ramp work upon completion. Any work that does not comply with the borough specifications shall be removed at the solorise. (Added 5-27-97 by Ord. No. 513) amended 4-9 02 by Ord, No. 564)

## § 78-12.1. Appeals. [Added 11-13-1989 by Ord. No. 420]

Any aroperty owner wishing to appeal the decision of the Duilong inspector or Hollsing Officer pursuant to § 78-12 herein shall file a written hotice of appeal with the Borough Clark within ten (fill days of the data that said property owner receives a written decision by the Housing Officer or Building Inspector. Said appeal shall then be placed on the agenda for the regular Borough Council Veeding to be held within thirty (30) days of the data that said property owner receives a written decision by the Housing Officer or Building Inspector. Said appeal shall then be placed on the agenda for the regular Borough Council Veeding to be held within thirty (30) days of the date the course shall file his hotice. Said notice shall render the course's name, address of the property in question and basis for appeal. Said notice shell also contain, if necessary, photographs of the applicable portion of the improvements in guestion.

## § 78-13. Violations and penalties. [Amended 11-13-1989 by Ord. No. 420]

Any person violeting any of the provisions of this Article shall be subject to a persity of imprisonment for a term not exceeding ninety (90) days or a fine nor exceeding five nundred do lars (\$500.), or both. In addition to the lines and penalties provided herein, said person shall be ordered to construct the required improvements and may be held in contempt for any failure to comply.

#### ARTICLE III Street Excevations and Openings [Adopted 11-27-78 as Ord. No. 305]

### 578-14. Prorequisitas to opening streets.

No person, firm, purchaship or corporation shall open or diplatrency in any public road, street or highway of this burough without having hits down rach of the fellowing:

- A. Made a written application therefor to the Borough of Woodstown, in the County of Salam, on forms to be provided by it and supplied a map or sketch of the project
- 3. Faid the proper fee to said borough for such opening of trench in the amount specified by 9 78-18.

