

Chapter 2: What is a School Zone?



There are generally three zones around the school one must think about when applying safety standards for walking and bicycling routes to school: the state statutory definition of school zone, the student catchment area or enrollment boundary, and the school walking zone.

What is a school zone?

The State Statutory Definition of School Zone

Title 39 of the New Jersey Statutes Annotated (N.J.S.A.) contains the laws that control every publicly maintained roadway, as well as the majority of laws that govern bicycle and pedestrian matters. It also includes two definitions for “school zone.” N.J.S.A. 39:1-1 describes a school zone as:

1. The section of roadway adjacent to a school, or,
2. Where school crossings have been established in the vicinity of a school, upon which are maintained appropriate "school signs" in accordance with specifications adopted by the chief administrator and in accordance with law. "School crossing" means that portion of a publicly maintained roadway where school children are required to cross the roadway in the vicinity of a school.

The focus of this Design Guide is on engineering measures that can be utilized to make the environment around schools a place where children and their parents feel safe and want to walk and bicycle. Because the first statutory definition is limited to the area around the school and the second statutory definition is confined to crossings, both of these definitions of “school zone” are too restrictive for the purposes of this Guide.

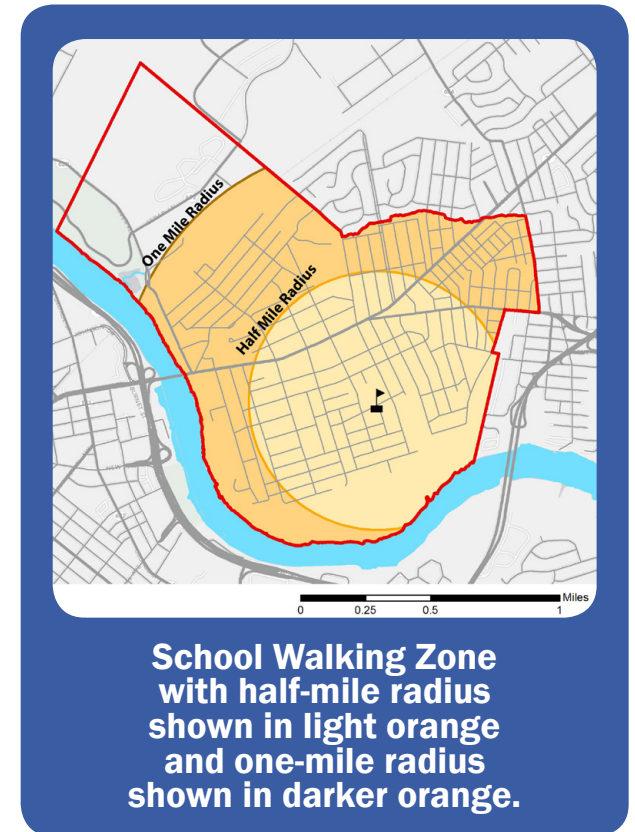
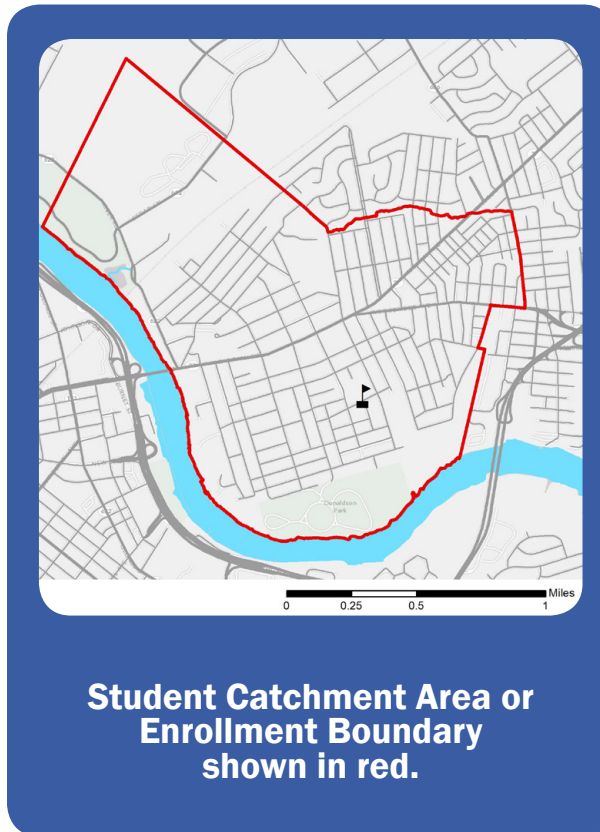


Student Catchment Area or Enrollment Boundary

The student catchment area or enrollment boundary refers to the geographic area from which students are eligible to attend a local school. This area is the theoretical outside limit for a “school zone.” For schools with a geographically expansive catchment area, some students will live too far away from school to reasonably be expected to walk or bike. In addition, the growth of charter and magnet schools has made applying an enrollment boundary more difficult because these schools can typically draw from anywhere within a school district. Therefore, the student catchment area, as a practical matter, and for the purposes of this design guide, could cover too much territory to function as the school zone.

School Walking Zone

The concept of “school zone” that is the focus of this design guide is best described by the term school walking zone. The school walking zone can be defined as the area surrounding a school that includes the public rights of way that are most frequently and intensively used by students and others accessing the school, especially by walking or by bicycle. In this design guide, unless otherwise specified, the term “school zone” is synonymous with the term “school walking zone.”



School Busing

School walking zones vary in size depending on local policies, context and the student enrollment boundary. While there is no established definition of a school walking zone, a number of sources provide guidance regarding the extent of a school walking zone.

- Under the FHWA program guidance for the federal Safe Routes to School (SRTS) funding program, projects and activities must be located or take place within two miles of a primary or middle school (grades K – 8).
- Also suggestive is the fact that New Jersey law does not require and the state does not provide funding to bus public school students that live within two miles of school.
- The MUTCD defines a school zone as “a designated roadway segment approaching, adjacent to and beyond school buildings or grounds, or along which school related activities occur.”
- The NJ SRTS Resource Center recommends a school walking zone covering the area within at least one half mile of the school.
- The National Center for Safe Routes to School general rule of thumb is that the walking boundary is one half mile to one mile around an elementary school, and sometimes further for middle and high schools.

For this design guide, the term school zone or school walking zone refers to the area within approximately a one-mile radius of a school – a distance easily covered by most elementary students on foot or bike. This area should be adjusted as needed to take into account local conditions, such as the extent of the school catchment area, traffic conditions, geographic constraints and other local concerns. During the course of determining the school walking zone, it is likely that conditions that are problematic to pedestrians and bicyclists will be discovered which may need to be remedied by applying the design guidance contained in this document.

New Jersey Administrative Code (N.J.A.C) 6A:27 sets forth the rules governing the transportation of students to and from school. A school district is required to provide busing only to those students who live more than 2 miles from their public elementary and middle schools and more than 2.5 miles from their public high schools and to certain special education students. Boards of education are not required by law to provide busing for students who live less than remote from school even for safety reasons. However, many districts have opted to bus students who live below these distance thresholds, a service known as “courtesy” busing or non-mandated busing. Some school districts help defray the cost of courtesy busing by charging the student’s parents or legal guardians for this service. Municipalities may also contract with boards of education for this service and charge the parents. This transportation service is called “subscription” busing.

State law (N.J.S.A. 18A:39-1.5) requires school districts that provide courtesy busing to adopt a policy addressing the busing of students who walk along hazardous routes between their homes and schools. The policy must include a list of hazardous routes that require courtesy busing and the criteria used in designating the routes as hazardous. In New Jersey, routes are considered hazardous based on criteria such as high traffic volume, traffic speed, roads with blind curves or steep inclines and declines, lack of sidewalks, presence of bridges and train tracks, and busy roads or highways that must be crossed to reach the school. School districts must work with municipal officials and police officers when designating a route hazardous.

For more information visit, www.state.nj.us/education/finance/transportation/

Is there any relationship between a drug-free, drunk-driving free or smoke-free school zone and a school walking zone?

No, there is no relationship. Drug-Free / Drunk-Driving Free / Smoke-Free School Zones include the areas on or within 1,000 feet of property used for school purposes and which is owned or leased to any elementary or secondary school or school board. Any Drug-Free / Drunk-Driving Free / Smoke-Free School Zone map must be created and adopted by the municipality. The map is intended to be used as evidence in prosecutions arising under the criminal laws of the state (N.J.S.A. 2C:35-7).

How do you designate a school zone?

Designating a school zone or school walking zone is accomplished by local action, often on an ad hoc basis by, for example, a SRTS working group as part of the process of developing a SRTS Travel Plan. School zone boundaries can be formalized by the school board or a municipality by formal adoption of the SRTS Travel Plan or by ordinance.

School zones, as defined by New Jersey statute, do not need to be adopted by municipal ordinance or resolution; however, designated school crossings can be adopted by municipal ordinance or resolution. A municipality may choose to designate crossings as school crossings where special

emphasis is needed due to a combination of the number of crossing school children, geometry of the approaching roadways, approach speed, and traffic volumes. Special emphasis could include placement of an adult school crossing guard, installing signage, pavement markings or a signal.

How is a reduced school speed zone designated?

A reduced speed zone is designated through signing supplemented with striping. A school zone should be marked with special signing to alert drivers of the high concentration of children. School crossing signs, speed signs, and school zone pavement markings remind drivers to treat the area with special care and attention.



Image: The RBA Group

Where should the school speed limit zone begin and end?

NJDOT has adopted the federal Manual on Uniform Traffic Control Devices (MUTCD) for rules and regulations concerning the placing, specification, location and maintenance of highway and traffic signs and markings (N.J.S.A. 3:4-183.27). According to the 2009 MUTCD, the beginning point of a reduced school speed limit zone should be at least 200 feet in advance of the school grounds, a school crossing, or other school related activities; however, this 200-foot distance should be increased if the reduced school speed limit is 30 mph or higher (MUTCD Section 7B.15).

The speed limit in NJ, unless otherwise posted, is 25 mph when passing through a school zone (N.J.S.A. 39:4-98). Therefore, many school speed limit zones may be as short as 400 ft. However, the beginning and end points of a school speed limit zone should be determined based on the location of other traffic control devices, features and locations where children cross the roadway.

What is the school zone speed limit? Who determines the speed limit?

Establishing and enforcing the proper school zone speed limit is critically important. The speed limit in New Jersey, unless otherwise posted, is 25 miles per hour (mph) when passing through a school zone during recess, when the presence of children is clearly visible from the roadway, or while children are going to or leaving school, during opening or closing hours (N.J.S.A. 39:4-98). Because it is established by statute, a 25 mph school zone speed limit does not require adoption of an ordinance and approval from NJDOT.

However, not all school speed limit zones are 25 mph. Local authorities, with reference to roadways under their jurisdiction, may by ordinance, or in the case of county authorities, by ordinance or resolution, designate a reasonable and safe speed limit that is less than or greater than 25 mph after an engineering and traffic investigation. The establishment of school speed limits should always be done in coordination with the agency having jurisdiction over the roadway in question, particularly if the limits are less than or greater than 25 mph [N.J.S.A. 39:4-98(c)].

Hoboken’s 20 is Plenty Campaign

In October 2010, the City of Hoboken launched a “Twenty is Plenty” driving and pedestrian safety public awareness campaign to encourage drivers to consider driving no faster than 20 mph despite the 25 mph speed limit on most Hoboken streets. The campaign was inspired by the “20’s Plenty for Us” effort started in Britain. Hoboken promoted the Twenty is Plenty effort through newspapers, flyers at the Parking Utility, and with electronic signs at major inbound streets.

Not So Fast!

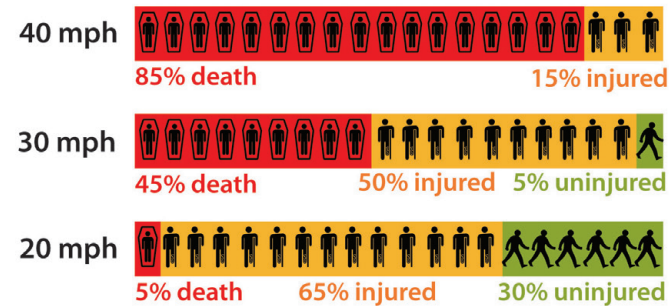


DRIVING JUST 5MPH SLOWER CAN SIGNIFICANTLY DECREASE THE LIKELIHOOD OF A PEDESTRIAN'S DEATH IN A COLLISION.

Why is driving 20 mph so important?

Driving just 5 mph slower can have a profound impact on the safety of pedestrians.

Pedestrian Injuries at Impact Speeds



Data Source: National Cooperative Highway Research Program
Coffin designed by Sergi Delgado and injury designed by Olivier Guin from The Noun Project

For more information on Hoboken’s “20 is Plenty” campaign visit www.hobokennj.org/departments/transportation-parking/twenty-is-plenty/

For more on England’s “20 is Plenty for Us” effort visit www.20splentyforus.org.uk/

When does “when children are present” apply?

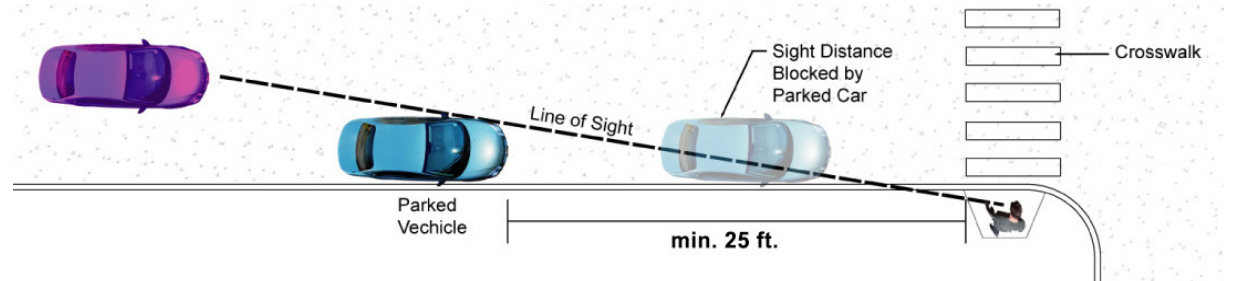
“When children are present” does not apply at all times in a school zone. The Superior Court of New Jersey has determined the lower speed limit in a school zone is only applicable (1) during school hours, but only during recess, when children are clearly visible from the roadway, or (2) when children are going to or leaving school during opening or closing hours of school (State of New Jersey v. Floyd A. Beierle (1999)). The reduced school zone speed limit does not apply outside of these times.

Regardless of the time of day or year, drivers should always be alert and on the lookout for children when driving near schools, parks or other attractions.

What other traffic laws relate to school zones?

Restricting parking in advance of crosswalks and corners improves visibility of the crossing for both drivers and pedestrians. According to N.J.S.A 39:4-138, parking is not permitted:

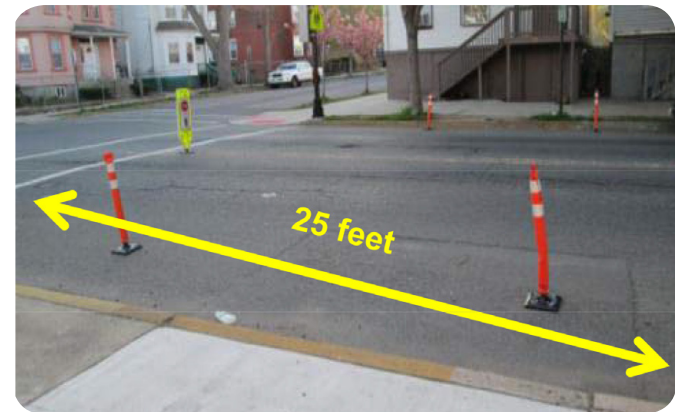
- within an intersection;
- on a crosswalk;
- within 50 feet of a “stop” sign; or
- within 25 feet of the nearest crosswalk or side line of a street or intersecting highway or within 10 feet of the nearest crosswalk or side line of a street or intersecting highway, if a curb extension or bulb-out has been constructed at that crosswalk.



Recommended Parking Setback for Sight Distance. Image: The RBA Group

Criteria for Safe Speed Limit Design

According to N.J.S.A. 39:4-98, when designating reasonable and safe speed limits for a street under its jurisdiction, as part of an engineering and traffic investigation, a municipality or county shall consider, but not be limited to, the following criteria: crash history; residential density; the presence, or lack, of sidewalks; the prevalence of entry and exit ways for business and commercial establishments; whether school children walk adjacent to the street on their way to and from school; the proximity of recreational or park areas, schools, community residences, family day care homes, child care centers, assisted living facilities or senior communities; and input from the school district and other community representatives.



The City of New Brunswick has begun installing plastic pylons in the no-parking area, a practice called “daylighting.” The cost of purchasing and installing the standard-use pylons is minimal and can be done in-house with little delay. Image: VTC

Are designating school walking and/or bicycling routes required by law?

New Jersey state laws or regulations do not require school districts to have walking or bicycling route plans that designate particular routes to school. Therefore, there is no official or uniform process for designating a school walking or bicycling route.

Who is responsible for developing school walking and/or bicycling routes?

There is no singular entity responsible for developing school walking or bicycling routes. A school route map should be developed through a partnership between the school and surrounding community ideally as part of the development of a comprehensive Safe Routes to School (SRTS) School Travel Plan. A SRTS School Travel Plan “maps out” how to improve pedestrian and bike travel to and from school by identifying where students currently walk and bike, where students would walk and bike if they could and what changes need to be made so that students can and will walk and bike to school. A SRTS School Travel Plan should be prepared by a team of school officials, municipal representatives, local law enforcement, parents, students, safety advocates and other interested parties responsible for student safety.

Mapping the neighborhood is one of the six elements of a SRTS School Travel Plan. The other elements include a school description, working group and partnerships, walk/bike barriers and opportunities, goals and actions, and evaluation. For more on developing a SRTS School Travel plan, visit the NJ SRTS Resource Center at: www.saferoutesnj.org/resources/stp/

Get Points with your School Travel Plan

Though applications to receive NJDOT SRTS grants do not require a School Travel Plan, schools that have completed a School Travel Plan will be eligible for extra points for submitting the Plan in the application for SRTS infrastructure grant funding. While the preparation of a SRTS Travel Plan is not an eligible activity for New Jersey SRTS funding, schools and municipalities can receive assistance in developing school travel plans from the Safe Routes to School Regional Coordinators at their Transportation Management Association (TMA). You can find your Regional Coordinator on the NJ SRTS Resource Center website at www.saferoutesnj.org/about/regional-coordinator-tmas/

To receive consideration for Silver level SRTS Recognition, share your School Travel Plan with the NJ Safe Routes to School Resource Center by emailing it to srts@ejb.rutgers.edu. For more information on the Recognition Program Levels, visit www.saferoutesnj.org/levels/

Municipalities and school districts registered to Sustainable Jersey can include School Travel Plans as part of the submission requirements to receive certification. For more on Sustainable Jersey, visit www.sustainablejersey.com/

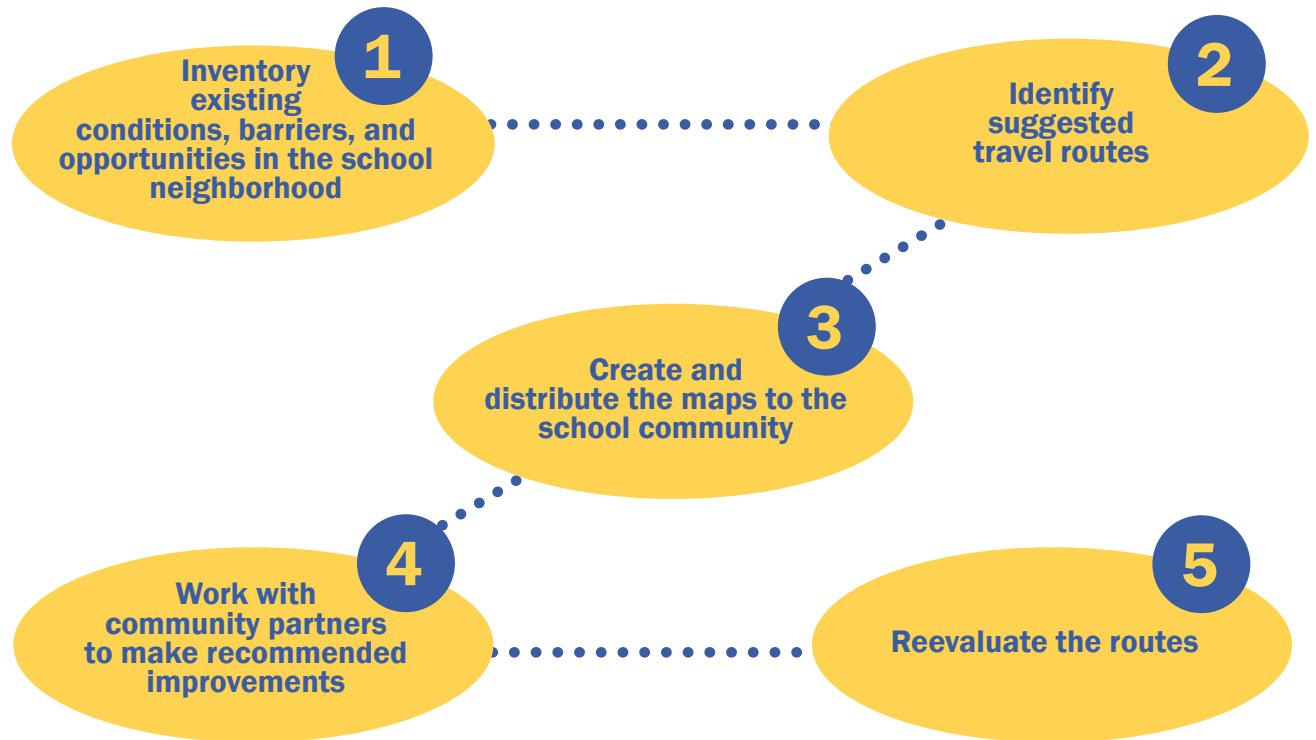
Recommendations for a School Route Plan

The federal MUTCD recommends that a school route plan for each school serving elementary and high school students should be prepared in order to develop uniformity in the use of school area traffic controls and to serve as the basis for a school traffic control plan for each school (MUTCD, Section 7A.01). The school route plan should be developed by the school, law enforcement and traffic officials responsible for school pedestrian safety and should include a map. The map should show

- streets,
- the school,
- existing traffic controls
 - signalized intersections,
 - stop or yield sign approaches,
 - crossing guard locations,
- established school walk routes, and
- established school crossings including marked crosswalks.

How should school walk routes and school bike routes be developed?

Before routes can be designated, a team of school administrators, parents, teachers, students, municipal engineers and planners, and elected officials should comprehensively evaluate safety concerns along these potential routes. Steps in this process include:



Step 1 Inventory existing conditions, barriers, and opportunities in the school neighborhood

- Start with a base map that shows the location of the school and the surrounding neighborhood. The area evaluated will vary depending on the extent of the selected school walking zone. It is recommended that all the routes within one half mile to one mile of the school are assessed. The team can use paper road maps or use the NJ SRTS Resource Center online tools to map out the school zone. www.saferoutesnj.org/resources/stp/maps/
- Conduct a walk and/or bike assessment to identify existing facilities and safety concerns that could impact students walking and bicycling to and from school. While the walk and bike assessments are very similar, the challenges pedestrians and bicyclists face can be very different. For example, a few minor cracks in the sidewalk might be fine if you are walking, but a smooth road surface which is free of debris that can cause flat tires is much more important for bicyclists. Also, a walk assessment can identify areas where crosswalks are faded or missing, however it will not indicate whether or not there is a safe place to lock bikes at school. Therefore, it is important to conduct both walk and bike assessments. More information, including downloadable materials for conducting a walk and bike assessment, is available at www.saferoutesnj.org/resources/stp/walkbike-assessments/#



Mapping exercise in Lumberton, NJ. Image: The RBA Group

Step 2 Identify suggested travel routes

- A recommended route should be selected on the basis of community input, traffic patterns, traffic volume, speed limits, road hazards, high crime areas, and the existence of sidewalks, paths, crosswalks, bike lanes, traffic signals and crossing guards. The chosen route should limit the number of street crossings and provide the greatest separation between students and traffic.
- Sometimes the safer route is not the most direct. However, routing students more than a block or two out of their way should be avoided or they will likely ignore the selected route. When determining the feasibility of requiring children to walk a longer distance to a street crossing with an existing traffic signal, the MUTCD recommends considering the following factors: the availability of adequate sidewalks or other pedestrian walkways to and from the location with existing control, the number of students using the crossing, the age levels of the students using the crossing and the total extra walking distance.
- Ultimately, every street should be a walking or bicycling route. However, until that vision is achieved, identifying suggested walking and bicycling routes can help steer people to safer routes.

Step 3 Create and distribute the maps to the school community

- The map can be posted on the school website or handed out to parents and students.

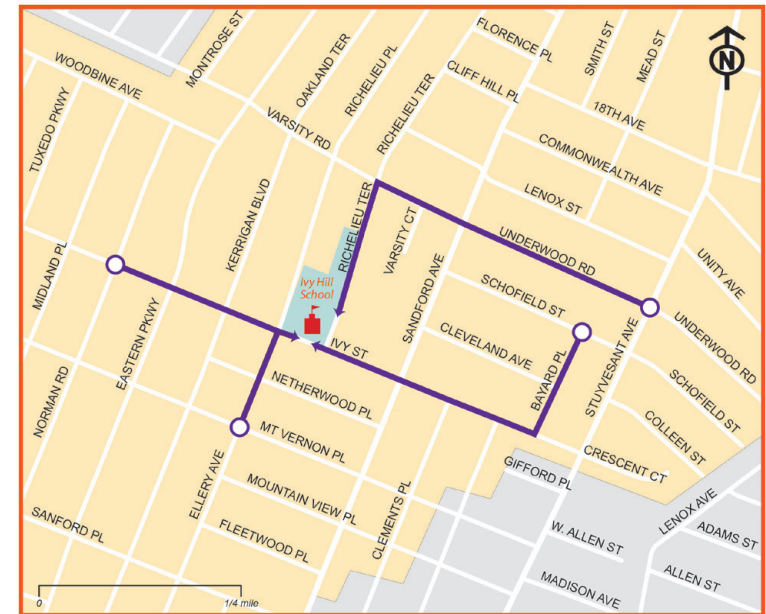
Step 4 Work with community partners to make recommended improvements

- Seldom are school walk or bike routes ever completely free from safety risks. Once created, these maps can help municipalities and school administrators identify priorities for where sidewalk and roadway investments should be targeted.

Step 5 Reevaluate the routes

- Once developed, the routes need to be reassessed annually by the team of school administrators, parents, teachers, students, municipal engineers and planners, and elected officials to ensure they are still meeting the needs of the student population. This can be accomplished by periodically completing walk and bike assessments can help evaluate progress in reaching SRTS goals.

Ivy Hill Walking School Bus



Map distributed to the Ivy Hill Elementary School community in Newark, NJ for Walk to School Day. Image: The RBA Group

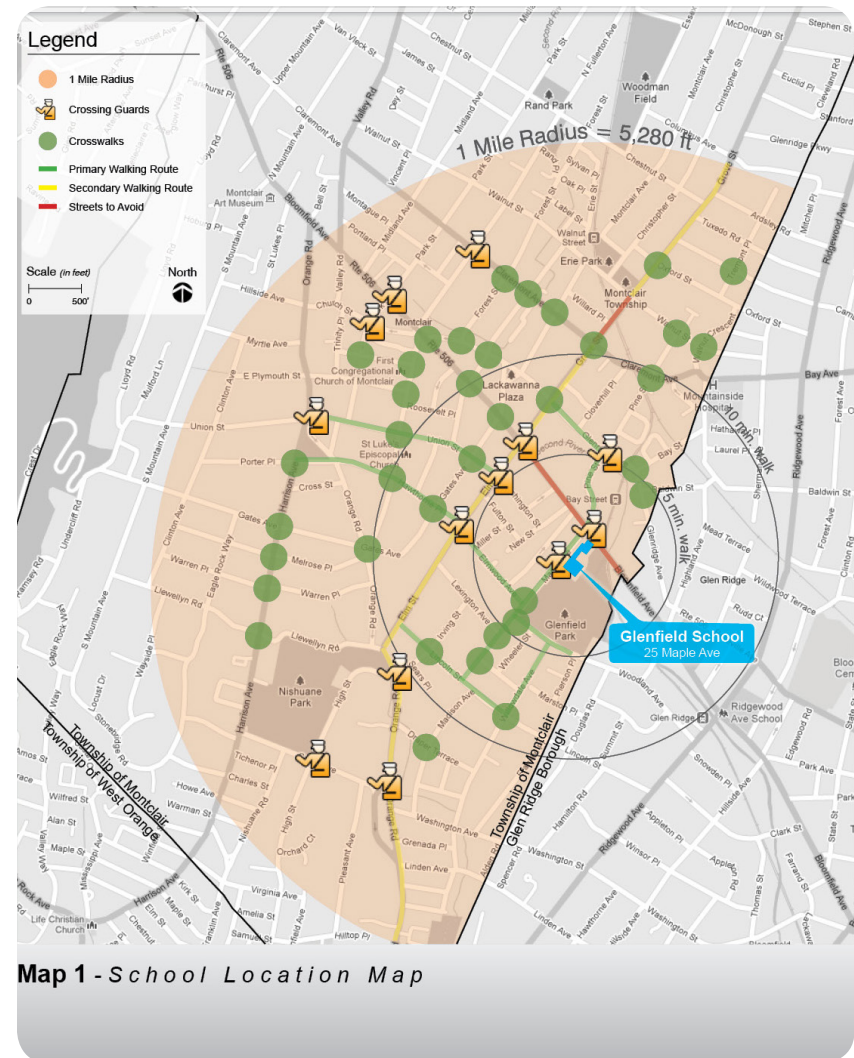
For more information on establishing a school walking route refer to *School Route Maps and the Tools to Create Them* developed in 2007 by the Pedestrian and Bicycle Information Center (PBIC). The resource is available at guide.saferoutesinfo.org/engineering/school_route_maps_and_the_tools_to_create_them.cfm.

The School Administrator's Guide to School Walk Routes and Student Pedestrian Safety by the Washington Traffic Safety Commission and Washington State Department of Transportation suggests processes for developing and maintaining school walk routes. The guide can be downloaded from www.wsdot.wa.gov/NR/rdonlyres/5463FD69-F7B9-477D-B9AA-D21CEEFCF722/0/SchoolAdminGuide.pdf.

Example: Developing a Walking Route Map for Montclair

In 2008, the Township of Montclair, through its SRTS Task Force, applied for and received funding through NJDOT for the development of three (3) E's of its district-wide Safe Routes to School program (Engineering, Encouragement and Enforcement). As part of this effort, the Township selected a consultant team to conduct SRTS workshops and develop Travel Plans.

In developing the Travel Plans, the project team confirmed preliminary walking and bicycling routes and analyzed the basic elements required for safe routes. The project team performed field investigations to observe the conditions around the schools. Observations were made of the physical conditions around the school campuses and surrounding neighborhoods, parking patterns and restrictions, as well as auto and foot traffic and circulation. Information was also gathered from local stakeholders – staff, students, parents, as well as community members such as the Township Engineer, local police, health and bicycle advocates, board of education transportation representatives, and local crossing guards through interviews, travel surveys and community workshops. The resulting maps identify key features of the school neighborhood such as the location of crossing guards, primary and secondary walking routes and crosswalks.



Pedestrian Related Laws (N.J.S.A. 39:4-32 to 39:4-36)

Drivers and pedestrians are responsible for each other's safety.

Pedestrians must:

- Not leave a "curb or other place of safety" by walking or running into the path of a vehicle which is so close that it is impossible for the driver to yield or stop. [N.J.S.A. 39:4-36(a)(2)]
- Yield to drivers when crossing a road at any point other than within a marked or unmarked crosswalk at an intersection. [N.J.S.A. 39:4-36(a)(4)]
- Not cross a roadway against the "stop" or red signal at a crosswalk, whether marked or unmarked, unless otherwise specifically directed to go by a traffic or police officer, or official traffic control device. [N.J.S.A. 39:4-32(a)]
- Walk on sidewalks where they are provided and accessible. (N.J.S.A. 39:4-34)
- Walk along the extreme left side of a highway or its shoulder when possible facing approaching traffic, when practicable, if there is no sidewalk. (N.J.S.A. 39:4-34)
- Exercise due care for his/her safety. [N.J.S.A. 39:4-36(a)(5)]
- Not cross any highways having roadways separated by a median barrier except where provision is made for pedestrians to cross. (N.J.S.A. 39:4-34)
- Cross intersections at crosswalks where traffic is directed by a police officer or traffic signal. (N.J.S.A. 39:4-33)

Pedestrians risk fines and community service if they fail to yield the right of way to motorists anywhere except at crosswalks [N.J.S.A. 39:4-36 (b)].

Drivers must:

- Stop and remain stopped while a pedestrian is in a marked crosswalk. [N.J.S.A. 39:4-36(a)(1)]
- Stop and remain stopped for pedestrians crossing within the adjacent crosswalk into which the motorist is turning right from either a red signal, stop or yield sign. [N.J.S.A. 39:4-36(a)(1) and (2)]
- Stop and remain stopped if a pedestrian is within one lane of their half of roadway. [N.J.S.A. 39:4-36(a)(1)]
- Not overtake and pass a vehicle that is stopped to permit a pedestrian to cross the roadway. [N.J.S.A. 39:4-36(a)(3)]
- Yield to pedestrians at unmarked crosswalks at an uncontrolled intersection. [N.J.S.A. 39:4-36(a)]
- Exercise due care for the safety of any pedestrian upon a roadway. [N.J.S.A. 39:4-36(a)(5)]

With the passage of NJ Assembly Bill 1329 in 2010, drivers now risk \$200 fines, 15-day community-service sentences and four points if they fail to bring their vehicles to complete stops at crosswalks to allow pedestrians to pass in front of them. The new law, N.J.S.A. 39:4-36(b), provides that when a collision occurs between a vehicle and a pedestrian within a marked crosswalk, or at an unmarked crosswalk at an intersection, there shall be permissive inference that a driver did not exercise due care for the safety of the pedestrian. The law also specifies that a pedestrian crossing on a "Go" or green signal has the right of way over all vehicles, including those making turns.