



Safe Routes to School Planning Study

Prepared For

Borough of Ogdensburg

Sussex County

New Jersey

PREPARED BY

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Table of Contents

1. Project Background
2. Scope of Work
 - a. Project #1: Passaic Avenue Sidewalks
 - b. Project #2: Route 517/Main Street Sidewalks
 - c. Project #3: Kennedy Avenue Sidewalks
3. Preliminary Construction Estimates
4. Required Permitting and Easements
5. Summary and Findings

Project Background

The Safe Routes to School Program (SRTS) is a federally funded program that was initiated by the Safe, Accountable, Flexible, Efficient Transportation Equity Act - A Legacy for Users (SAFETEA-LU). The federal-aid SRTS program provides federal-aid highway funds to State Departments of Transportation. The program targets schools for grades K-8 only. The main objectives of the program are:

- To enable and encourage children, including those with disabilities, to walk and bicycle to school;
- To make bicycling and walking to school a safer and more appealing transportation alternative, thereby encouraging a healthy and active lifestyle from an early age; and,
- To facilitate the planning, development and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption and air pollution in the vicinity of schools.

In New Jersey, as in other parts of this country, travel to school by walking and bicycling has declined dramatically over the past several decades. The adverse impacts of this trend on air quality, traffic congestion and childhood health are alarming.

The goal of New Jersey's Safe Routes to School Program is to assist New Jersey communities in developing and implementing projects and programs that encourage walking and bicycling to school while enhancing the safety of these trips. The program seeks to combine infrastructure improvements with enforcement, education and encouragement activities.

The desired outcomes for SRTS include:

- Increased bicycle, pedestrian and traffic safety
- Improvements to the physical environment to increase the ability to walk and bicycle to and from schools
- More children walking and bicycling to and from schools
- Decreased traffic congestion
- Improved childhood health
- Reduced childhood obesity
- Encouragement of healthy and active lifestyles
- Reduced fuel consumption
- Improved air quality
- Improved community safety
- Increased community security
- Enhanced community accessibility

- Increased community involvement
- Improved partnerships among schools, local municipalities, parents, and other community groups, including non-profit organizations
- Increased interest in bicycle and pedestrian accommodations throughout a community

Funds are available for a variety of both infrastructure and non-infrastructure projects that benefit elementary and middle school children in grades K-8, both public and private schools. The infrastructure portion can fund design, construction and planning of the proposed improvements while the non-infrastructure portion would fund activities that encourage walking and bicycling to school.

A variety of improvements can be implemented to create safer walking and cycling environments including improving roads and sidewalks, enforcing speed limits, educating students and improving personal safety. Successful Safe Routes to School programs usually includes one or more of these approaches:

- Engineering: An engineering approach creates operational and physical improvements to the infrastructure surrounding the school that reduce speeds and conflicts with motor vehicles and establishes safer crosswalks and pathways.
- Enforcement: The enforcement approach partners with local law enforcement to ensure that traffic laws (speeding, idling, cell phone, yield-to-pedestrian) are obeyed in the vicinity of schools and initiating community enforcement, such as crossing guard programs.
- Education: Education teaches children and parents about the broad range of transportation choices, instructing them in important lifelong bicycling and walking safety skills and launching driver safety campaigns in the vicinity of schools.
- Encouragement: An encouragement strategy promotes walking and bicycling to school on a regular basis through events and activities.
- Evaluation: Monitoring the different strategies and documenting their outcomes and trends by collecting data before and after their intervention is a critical part of determining the effectiveness of each strategy.

Although each strategy can stand alone, the most successful programs integrate elements from all of them. One way to address all approaches is to develop a Safe Routes to School Action Plan. A Safe Routes to School Action Plan will addresses specific conditions within a municipality, district or school relevant to journeys to and from school. Action plans not only address physical infrastructure needs such as sidewalks and roadway crossings, but also concerns about safety and health.

Applicants to this program must submit separate applications for infrastructure and non-infrastructure projects.

Selection of SRTS projects involves the participation of civic, education and environmental groups, the transportation community and other government organizations such as the state's Metropolitan Planning Organizations.

These programs can bring a wide range of benefits to students and the community. These include an easy way for children to get the regular physical activity they need for good health and even to ease traffic jams and reduce pollution around schools.

Local and regional government, schools and community non-profit organizations ready, willing and able to implement SRTS initiatives are eligible to apply for funding.

On December 22, 2008, the New Jersey Department of Transportation awarded \$4 million in federal SRTS funds, providing grants for projects in 33 municipalities, in amounts ranging from \$8,000 to \$300,000. Twenty infrastructure projects were funded at over \$3.5 million and eleven non-infrastructure projects received over \$430,000.

The Borough of Ogdensburg was awarded a \$23,000 grant to prepare a study of potential projects that will provide increased safety infrastructure along various routes to the K-8 Ogdensburg Elementary School. The application identified that only about 10% of students currently walk or bike to school even though 100% of the students at the school live within 2 miles. Most students are either driven to and from school or utilize the courtesy bus, which is a service for which the parents pay. Many of the major routes from areas with large concentrations of houses to the school either do not have sidewalks or have small areas of sidewalks that may be in a state of disrepair. These same routes are also utilized by morning commuter traffic, most of which is headed north to Route 23 or south to Route 15.

This study will investigate the benefits of installing sidewalks along these routes, identify any potential areas of concern or obstacles to be overcome, plan out the length of each project and determine the overall feasibility of the various projects. As part of this study, preliminary cost estimates will be prepared and a summary of potential permits and agreements will be provided.

Scope of Work

Project #1 – Passaic Avenue Sidewalks

Passaic Avenue is a double yellow lined road that runs in an east-west direction connecting Main Street to a number of residential areas on the western side of the Borough. The width of Passaic Avenue varies from 30' wide to 25' wide and currently only has curbing near the intersection with Main Street. The curbing disappears as Passaic Avenue runs west. The general roadway conditions are noted in the below pictures.



The proposed project would entail the installation of new granite curbing and sidewalks along the north side of Passaic Avenue from the intersection of Main Street (directly adjacent to the school) in a westerly direction for a distance of roughly 2,500 feet, or slightly less than ½ mile. The installation of curbing would establish a uniform roadway width.

The only major obstacle along Passaic Avenue is a sharp bend with a retaining wall on the north side and a steep drop off and guard rail on the south side. This creates a blind curve for vehicles and a dangerous situation for school children walking along the roadway. The road is only 25' wide through this curve leaving little to no room for children walking to school. The conditions are depicted in the below pictures.



To remedy this obstacle, we would explore the possibility of narrowing the roadway to 20', which is the minimum allowable by the New Jersey Residential Site Improvement Standards, and providing curbing and a 4' wide sidewalk along the retaining wall. In advance of each approach to the narrowed section of roadway, signs would be posted alerting vehicular traffic of the narrowed roadway ahead. The Borough would also look into reducing the speed limit through this area as an additional means of traffic calming. By remedying this obstacle, the sidewalk would serve significantly more residences on the western side of the curve.

Project #2 –Route 517/Main Street Sidewalks

County Route 517/Main Street is a double yellow lined road that runs in a north-south direction provides access from the Boroughs of Ogdensburg and Franklin Lakes to Route 15 and Route 23. This roadway leads directly to the school at the intersection of Passaic Avenue and Highland Avenue. To the south of the main school building is a playground that is accessible from one of the school's parking lots. Behind the school are two baseball fields. A large housing development exists at Glens Brook Road with large numbers of school children coming from this area of the Borough

This project would entail installing sidewalks along Route 517 from Glens Brook Road to the school, a portion of which would be from the driveway of the commercial property located just to the south of the school property. This distance is roughly 1,500 feet, or less than 3/10 of a mile. Along the roadway, curbing would also be installed per the County's requirements.

Based on site walkthroughs, it appears that the drainage culvert underneath Route 517 is not wide enough to accommodate a sidewalk. Instead, the sidewalk would be run through the Back Thru the Future Technology Disposal commercial property on Tax Lot 1.01 in Block 25 and through a small wooded area, connecting the school, playground and baseball fields to the southern part of the Borough.



As shown below, the sidewalks could easily be run along Route 517 with curbs delineating the limits of the roadway and possibly a grass strip between the sidewalk and the curb.



Project #3 – Kennedy Avenue Sidewalks

Kennedy Avenue is a double yellow lined road that runs in an east-west direction. The width of Kennedy Avenue varies from 30' wide to 25' wide and currently only has curbing near the intersection with Main Street. Similar to Passaic Avenue, the curbing disappears as Kennedy Avenue runs west. The general roadway conditions are noted in the below pictures.



This project would entail the installation of new curbing and sidewalks along the north side of Kennedy Avenue from the intersection of Main Street (one block north of the school) in a westerly direction for a distance of roughly 1,500 feet, less than 3/10 of a mile, to the church. The installation of curbing would establish a uniform roadway width.

Beyond the church, the road provides another blind curve with steep embankments on either side of Kennedy Avenue that would make sidewalk installation unfeasible. The proposed end of the Kennedy Avenue project is depicted below.



In addition to the sidewalk along Kennedy, sidewalks would also be installed along Church Street to connect Kennedy to Passaic Avenue. As with the other proposed projects, curbs would be installed. Due to the existence of fences and landscaping at the edge of pavement, the road might be narrowed slightly to accommodate the proposed sidewalk.



Preliminary Construction Estimates

The following preliminary cost estimates have been generated for each of the projects:

Passaic Avenue Sidewalks:	\$250,000
Route 517/Main Street Sidewalks:	\$160,000
Kennedy Avenue Sidewalks:	<u>\$150,000</u>
Total:	\$560,000

Line by line cost estimates are included on the following pages for each project.

ENGINEER'S ESTIMATE - PASSAIC AVENUE SIDEWALKS

PROJECT NAME: Safe Routes to School Planning Study
MUNICIPALITY: Borough of Ogdensburg
PREPARED BY: A. West

DATE: 08/24/09
PROJECT NO. 090517401
REVIEWED BY: G. Buczynski

ITEM NO	DESCRIPTION	APPROX.		UNIT PRICE	TOTAL
		QTY	UNIT		
1	Breakaway Barricade	10	UNIT	\$50.00	\$500.00
2	Drum	25	UNIT	\$20.00	\$500.00
3	Traffic Cone	40	UNIT	\$10.00	\$400.00
4	Construction Signs	100	SF	\$10.00	\$1,000.00
5	Police Traffic Directors	200	HOUR	\$90.00	\$18,000.00
6	Clearing Site	1	LS	\$10,000.00	\$10,000.00
7	Sawcutting	2,450	LF	\$3.00	\$7,350.00
8	Granite Curb	2,450	LF	\$20.00	\$49,000.00
9	Pavement Repair Strip	2,450	LF	\$7.00	\$17,150.00
10	Concrete Sidewalk, 4" Thick	1,000	SY	\$65.00	\$65,000.00
11	Concrete Sidewalk, Reinforced, 6 " Thick	20	SY	\$75.00	\$1,500.00
12	Concrete Driveway, Reinforced, 6 " Thick	150	SY	\$75.00	\$11,250.00
13	Hot Mix Asphalt Driveway, 3" Thick	50	SY	\$30.00	\$1,500.00
14	Detectable Warning Surface	3	SY	\$225.00	\$675.00
15	Modular Block Retaining Wall	750	SF	\$30.00	\$22,500.00
16	Topsoiling, 4" Thick	2,000	SY	\$2.00	\$4,000.00
17	Fertilizing & Seeding, Type A	2,000	SY	\$1.00	\$2,000.00
18	Straw Mulching	2,000	SY	\$1.00	\$2,000.00
Estimated Construction Cost					\$214,325.00
15 % Project Contingency Cost					\$32,148.75
Total Project Cost					\$246,473.75

Remarks: This estimate covers installation of new sidewalk on the northern side of Passaic Ave. starting at Main Street and extending roughly 2,450 LF West. The proposed sidewalk will end near Tax Lot 8 in Block 21.

Signature
 Eugene F. Buczynski, PE, CME
 N.J. Professional Engineer Lic. #25818

ENGINEER'S ESTIMATE - ROUTE 517 SIDEWALKS AND SCHOOL PATHWAY

PROJECT NAME: Safe Routes to School Planning Study
MUNICIPALITY: Borough of Ogdensburg
PREPARED BY: A. West

DATE: 08/24/09
PROJECT NO. 090517401
REVIEWED BY: G. Buczynski

ITEM NO	DESCRIPTION	APPROX.		UNIT PRICE	TOTAL
		QTY	UNIT		
1	Breakaway Barricade	10	UNIT	\$50.00	\$500.00
2	Drum	25	UNIT	\$20.00	\$500.00
3	Traffic Cone	40	UNIT	\$10.00	\$400.00
4	Construction Signs	100	SF	\$10.00	\$1,000.00
5	Police Traffic Directors	120	HOUR	\$90.00	\$10,800.00
6	Clearing Site	1	LS	\$15,000.00	\$15,000.00
7	Sawcutting	900	LF	\$3.00	\$2,700.00
8	Granite Curb	900	LF	\$20.00	\$18,000.00
9	Pavement Repair Strip	900	LF	\$7.00	\$6,300.00
10	Concrete Sidewalk, 4" Thick	600	SY	\$65.00	\$39,000.00
11	Concrete Sidewalk, Reinforced, 6 " Thick	20	SY	\$75.00	\$1,500.00
12	Concrete Driveway, Reinforced, 6 " Thick	40	SY	\$75.00	\$3,000.00
13	Hot Mix Asphalt Driveway, 3" Thick	10	SY	\$30.00	\$300.00
14	Concrete Paver Walkway	90	SY	\$150.00	\$13,500.00
15	Detectable Warning Surface	3	SY	\$225.00	\$675.00
16	Modular Block Retaining Wall	740	SF	\$30.00	\$22,200.00
17	Topsoiling, 4" Thick	1,000	SY	\$2.00	\$2,000.00
18	Fertilizing & Seeding, Type A	1,000	SY	\$1.00	\$1,000.00
19	Straw Mulching	1,000	SY	\$1.00	\$1,000.00
Estimated Construction Cost					\$139,375.00
15 % Project Contingency Cost					\$20,906.25
Total Project Cost					\$160,281.25

Remarks: This estimate covers installation of new sidewalk for roughly 100-125' starting at the existing pavers near the playground behind the school, then roughly 300' across the wooded area to the commercial property and through a proposed easement on the commercial property up to the street. The sidewalk would then run along Route 517 for roughly 900' to Glens Brook Road.

Signature
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 N.J. Professional Engineer Lic. #25818

ENGINEER'S ESTIMATE - KENNEDY AVENUE SIDEWALKS

PROJECT NAME: Safe Routes to School Planning Study
MUNICIPALITY: Borough of Ogdensburg
PREPARED BY: A. West

DATE: 08/24/09
PROJECT NO. 090517401
REVIEWED BY: G. Buczynski

ITEM NO	DESCRIPTION	APPROX.		UNIT PRICE	TOTAL
		QTY	UNIT		
1	Breakaway Barricade	10	UNIT	\$50.00	\$500.00
2	Drum	25	UNIT	\$20.00	\$500.00
3	Traffic Cone	40	UNIT	\$10.00	\$400.00
4	Construction Signs	100	SF	\$10.00	\$1,000.00
5	Police Traffic Directors	120	HOUR	\$90.00	\$10,800.00
6	Clearing Site	1	LS	\$5,000.00	\$5,000.00
7	Sawcutting	1,550	LF	\$3.00	\$4,650.00
8	Granite Curb	1,550	LF	\$20.00	\$31,000.00
9	Pavement Repair Strip	1,550	LF	\$7.00	\$10,850.00
10	Concrete Sidewalk, 4" Thick	700	SY	\$65.00	\$45,500.00
11	Concrete Sidewalk, Reinforced, 6 " Thick	40	SY	\$75.00	\$3,000.00
12	Concrete Driveway, Reinforced, 6 " Thick	125	SY	\$75.00	\$9,375.00
13	Hot Mix Asphalt Driveway, 3" Thick	30	SY	\$30.00	\$900.00
14	Detectable Warning Surface	8	SY	\$225.00	\$1,800.00
15	Topsoiling, 4" Thick	1,000	SY	\$2.00	\$2,000.00
16	Fertilizing & Seeding, Type A	1,000	SY	\$1.00	\$1,000.00
17	Straw Mulching	1,000	SY	\$1.00	\$1,000.00
Estimated Construction Cost					\$129,275.00
15 % Project Contingency Cost					\$19,391.25
Total Project Cost					\$148,666.25

Remarks: This estimate covers installation of new sidewalk on the northern side of Kennedy Ave. starting at Main Street and extending roughly 1,350 LF West. The proposed sidewalk will end near the church just before the bend in the road. The estimate also covers the installation of new sidewalks on the western side of Church Street, connecting the proposed sidewalks on Kennedy to the proposed sidewalks on Passaic.

 Signature
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 N.J. Professional Engineer Lic. #25818

Required Permitting and Easements

As part of the County Route 517 project, a road opening permit from Sussex County would be required. This is a standard permit and obtaining this from the County would be a simple process.

The Route 517 sidewalk project would also require an easement through the Back Thru the Future Technology Disposal commercial property immediately to the south of the school property. This is currently being discussed between the Borough and the property owner. All required right of way or easement procedures for federally funded projects would be followed as a part of any project that would utilize private property for walkways or sidewalks.

An ecological review was performed to ascertain potential permitting requirements for the new sidewalk relative to the *Freshwater Wetlands Protection Act Rules* (NJAC 7:7A) and the *Flood Hazard Area Control Act Rules* (NJAC 7:13). The following presents an outline of the findings.

FRESHWATER WETLANDS

- There are two (2) separate locations along Project #2 –Route 517/Main Street Sidewalks where a freshwater wetlands permit will need to be obtained to construct the new sidewalk:
 1. An area along Main Street south of the existing school where a new brick path is proposed, and
 2. An area along Main Street just north of Glenbrook Road.
- Watercourses and wetlands are present in these locations and a wetland delineation is required;
- It appears that the appropriate permit to obtain is a General Permit (GP) # 17A, non-motorized, multiple use paths. Possibly a GP#17 for trails and boardwalks could be applicable, but a hard surface sidewalk may not be considered a trail by the NJDEP;
- The total area of wetlands, open waters and transition areas must not exceed 0.25 acres, and it appears that this condition could be satisfied; and,
- The regulated disturbances do not appear to be considered a Major Project under the *Stormwater Management Rules* (NJAC 7:8), but further investigation by an engineer is need to determine if the overall project along this common alignment is a Major Project. A Major Project must comply with the rules at NJAC 7:8.

FLOOD HAZARD AREA CONTROL

- There are three (3) separate locations where these regulations come into play for the new sidewalks:
 1. An area along Project #2 – Route 517/Main Street Sidewalks south of the existing school where a new path is proposed through the wooded area separating the school property and the adjacent commercial property,
 2. An area along Project #2 – Route 517/Main Street Sidewalks just north of Glenbrook Road and,

3. An area along Project #1 – Passaic Avenue Sidewalks just north of its intersection with Main Street.

- This type of activity does not neatly fit into any simple permit category, such as a Permit-by-Rule or General Permit. An Individual Permit (IP) is potentially required;
- The first location would disturb the riparian zone and potentially the flood hazard area of a small mountain tributary, if it has a contributory drainage area equal to or greater than 50 acres. Most of the riparian zone disturbance would be to a maintained lawn, but some disturbance would occur in herbaceous areas;
- The second location would disturb the riparian zone and more than likely not the flood hazard area because the stream invert is set far below the roadway elevation; however further analysis is required by an engineer. Riparian zone disturbance would be to maintained lawn and the weedy shoulder of Main Street;
- The third location would disturb the weedy shoulder of Passaic Avenue and probably not the flood hazard area because the invert of the stream is far below the roadway elevation. No wetlands are present at this location;
- It appears to me at first glance that the overall project along the two (2) separate projects within the overall project scope will be considered a Major Project; however further investigation is required by an engineer.

In conclusion, the proposed sidewalks in the Borough of Ogdensburg for the Safe Routes to School Program will require a freshwater wetlands General Permit and a Flood Hazard Area Control Individual Permit. Further analysis is required to determine if the project is subject to the Stormwater Management Rules

Summary and Findings

The Borough has placed priority on these projects in the following order:

1. Passaic Avenue Sidewalks
2. Route 517/Main Street Sidewalks
3. Kennedy Avenue Sidewalks

If possible, the Borough would prefer to construct the first two projects at the same time as these are of the highest level of importance and would serve the largest portions of school children. If funding were to be made available for the third project, the Borough would move forward with this project as well.

This planning study shows that each of the proposed projects can be constructed, most likely over a multi year period with the funding assistance of the New Jersey Department of Transportation's Local Aid Bureau. Each of these projects would provide an important improvement to the Borough's infrastructure and a vital safety upgrade for the school children of the Borough. It is clear that these proposed projects are in line with the Safe Routes to School program and the Borough is committed to pursuing these options to supplement the non-infrastructure efforts that are already underway.