

## Safe Routes to School Program

# River Plaza Elementary School Travel Plan

155 Hubbard Avenue, Middletown, NJ 07701



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## **DISCLAIMER**

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U.S. Department of Transportation  
**Federal Highway Administration**

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## **Executive Summary**

A Safe Routes to School (SRTS) Travel Plan is a resource to encourage and increase the number of students walking or bicycling to school. It provides directions for schools, students, families and the city to build a safer walking and biking environment for residents.

School Travel Plans are site specific and describe the needs of each particular school being studied. The plan includes observations, ideas and an action plan to address issues and problem areas. The Plan covers five aspects of the Safe Routes to School program – Education, Encouragement, Enforcement, Evaluation, and Engineering.

The School Travel Plan outlines the timeframe and funding priorities to support a coordinated schedule of streetscape improvements. In fact, the New Jersey Safe Routes to School (SRTS) infrastructure funding program strongly recommends applicants to have an approved School Travel Plan in order to apply for a grant.

### **1. Goals**

The goals of the River Plaza Elementary School Travel Plan are:

- a. Identify any issues that impact safety on the key route, Hubbard Avenue, used by students
- b. Provide a list of suggestions to improve safety of the travel environment around the school
- c. Prioritize the suggestions in terms of cost and time needed to make improvements
- d. Implement solutions to improve safety and encourage more students to walk and bike to school

### **2. Task Force**

This School Travel Plan is the product of a productive partnership. The River Plaza Elementary School SRTS Task Force came together out of a request from the PFA after a series of crashes on Hubbard Avenue that impacted the walking path that children take to and from school daily. The involvement of local stakeholders is an important part of ensuring the sustainability of the SRTS initiative and the Action Plan.

### **3. Community Barriers to Health**

According to the Community Health Needs Assessment Survey conducted 2011-2015 by Meridian Health, many residents in Monmouth County do not meet federal standards for healthy eating and physical activity. Weight issues indicate that more exercise is a need. Top concerns identified include:

- a. Physical fitness is limited and needs to be encouraged and increased
- b. The current percentage of children who are overweight or obese is 24.6%.
- c. The current percent of overweight adults in Monmouth County is 67.1%

#### **4. School Travel Data**

In May 2016, the River Plaza Elementary School teachers conducted a School Travel Tally to determine how students travel to and from school. Despite parental concerns regarding traffic safety, 8 percent of students walk to school, 55 percent of students are driven to school, 6 percent carpool, 27 percent use the school bus, and 4 percent of students ride bicycles to school.

#### **5. Barriers and Opportunities Identified for Safer Walking & Biking**

The Safe Routes to School Task Force, and Community Partners from the Township of Middletown conducted a walkability assessment of the road conditions along Hubbard Avenue on May 11, 2016. The major intersections near River Plaza Elementary School include:

1. Alexander Drive and Hubbard Avenue (in front of school)
2. Hubbard Avenue and Park Place
3. Hubbard Avenue/Nutswamp Road and Navesink River Road/Todd Road

Key opportunities for bicycle and pedestrian infrastructure improvement around River Plaza Elementary School include: repairing recent crash damage to the fencing along the sidewalk, restriping lines and stop bars and crosswalks so they are visible to drivers and pedestrians, and adding traffic calming measures such as road signs, SLOW SCHOOL ZONE pavement markings, and flashing slow signs.

#### **6. Action Plan**

The Safe Routes to School program categorizes the Action Plan into the “Five E’s:” Education, Encouragement, Enforcement, Evaluation and Engineering. This is a useful tool because it helps the school prioritize next steps. In a particular community, some of the action plan elements may be more urgently needed than others. While some elements will be prioritized, there will be short-term actions that can take place quickly under each E. This School Travel Plan recommends a number of improvements that can be made to encourage safe walking and biking. The action plan can be used to support SRTS and other Federal or State grant applications to fund bicycle and pedestrian improvements.

##### **Key Actions/Recommendations in Action Plan include:**

- Install traffic signals at Alexander Dr. and Park Pl. and high visibility crosswalk at Shadow Lake Dr. to assist walkers. Repair damaged fence on Hubbard Avenue
- Hold a “Drive Slow and Safe on Hubbard Ave” campaign to slow traffic and alert drivers to pedestrians
- Lower speed limit from 35 mph to 25 mph on Hubbard Avenue or extend the school zone to slow traffic where children walk and bicycle before and after school
- Install flashing slow signs and paint SLOW SCHOOL ZONE pavement markings on Hubbard Ave approaching school from both directions. Consider speed hump or table.
- Install high visibility crosswalks and restripe faded crosswalks and center line markings
- Ensure sidewalks are standard design width and remove any debris/obstructions
- Install bike lanes, sharrows markings or signs to alert drivers that students are biking

## **1. Walking and Cycling to Health**

### **1.1 The Challenge**

Over the past few decades, a number of societal and environmental changes have limited children's access to safe places where they can walk, bike and play. For example, increased traffic, neighborhoods that lack sidewalks and urban sprawl have contributed to a sharp decline in the number of students who walk or bike to school. Nationally, while 42 percent of children walked or biked to school in 1969, only 13 percent of children did so in 2001. Additionally, the popularity of television and video games as a means to entertain children has contributed to a more sedentary lifestyle. As a result, children and adolescents are less physically active than they were several generations ago.

The decrease in walking and biking to school and less physical forms of play has resulted in an alarming increase in childhood obesity. During the past four decades, the obesity rate for children ages 6 to 11 has more than quadrupled (from 4.2 to 17 percent), and the obesity rate for adolescents ages 12 to 19 has more than tripled (from 4.6 to 17.6 percent) in the United States.

Developing policies and practices to address these environmental and social barriers to daily physical activity are critical to reducing and preventing obesity among children. Supporting "active transport" (or walking and bicycling) to school presents an excellent opportunity to increase daily physical activity among youth.<sup>1</sup>

### **1.2. The Program**

Safe Routes to School (SRTS) is a federal program that encourages, teaches and enables children to safely bicycle and walk to school. The program aims to help children be more physically active with the intent to reduce chronic disease and prevent and reduce obesity. SRTS focuses on increasing the number of children walking and bicycling to school by building and repairing infrastructure such as sidewalks, crosswalks, and bicycle lanes. The program also encourages changes in travel behavior, supports increased enforcement of traffic laws around schools, and educates communities on the benefits and safety aspects of active transport. This report summarizes research on active transport to school, physical activity levels and health outcomes. It also explores the factors that influence walking and biking to school, including the impact of SRTS programs.

The SRTS Program is a collaborative effort of multiple stakeholders that include community members, elected officials, city planners, and police departments. SRTS brings a community closer together by implementing programs such as walking school buses, walkability assessments, bicycle rodeos and pedestrian safety presentations. The benefits of SRTS extend far beyond the schools into the community as a whole.

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<sup>1</sup> Walking and Biking to School, Physical Activities and Health Outcomes, Robert Wood Johnson Foundation

In addition to keeping residents physically active and healthy, community spaces that promote walking can draw people together safely and provide more opportunities for people of all ages and abilities to stay socially connected and engaged. Local areas with good pedestrian networks can also have substantial economic and environmental benefits to a local area.

Towns and cities that develop recreational programming that encourages the use of pedestrian networks, infrastructure, trails, or walkable facilities can help revitalize a downtown, increase private investment, increase property values, promote tourism, and support the development of a good business climate. A growing body of research connects higher property values and economically sound communities to better walkability and closer proximity among certain neighborhood destinations, including houses, parks, schools, businesses, services, and social venues.<sup>2</sup> Main streets can benefit economically from good sidewalks and the ability to easily and safely peruse shops, restaurants, and local services.

An SRTS Walkability Assessment and School Travel Plan “maps out” specific ways to improve pedestrian and bicycle travel to increase the number of students who walk and bike to school and to improve safety. A School Travel Plan is a report about the Walkability Assessment and identifies the following:

- Where students currently walk and bike?
- Where students would walk and bike if they could?
- What changes need to be made so that students can and will walk and bike to school?

The School Travel Plan identifies short term solutions for immediate action and implementation as well as long term solutions that may require planning and additional funds. Benefits of developing a School Travel Plan include:

- Creating partnerships between the school and surrounding community
- Generating ideas and actions so walking and bicycling is safer
- Building community excitement and support
- Making an application for a SRTS grant more competitive by demonstrating a connection between goals, actions and targets.

### **1.3. The Team**

The New Jersey Department of Transportation (NJDOT) funds and administers the SRTS program in New Jersey, and the Voorhees Transportation Center (VTC) at Rutgers’ University provides technical and administrative support.

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<sup>2</sup> Alfonso, Mariela. “Walk This Way: The Economic Promise of Walkable Places in Metropolitan Washington D.C.” May 25, 2012. Accessed June 2016. <https://www.brookings.edu/research/walk-this-waythe-economic-promise-of-walkable-places-in-metropolitan-washington-d-c/>.

The actual implementation of the SRTS program at River Edge Plaza Elementary School was undertaken by a group of organizations – EZ Ride, The School Parent Faculty Association, Middletown Township, the Middletown Board of Education and School District Administration.

### **EZ Ride**

In New Jersey, Transportation Management Associations (TMAs) have taken the lead in coordinating the implementation of the SRTS programs. TMAs are non-profit organizations whose mission is to implement transportation programs and services like carpools, vanpools, shuttles, biking and walking that reduce congestion and improve safety and air quality. EZ Ride is one of eight Transportation Management Associations (TMAs) in New Jersey and primarily serves Bergen, Essex, Monmouth, Passaic and Union counties.

### **River Plaza Elementary School PFA**

This effort to improve safety at River Plaza Elementary School on Hubbard Avenue was initiated by the President of the PFA who contacted the SRTS team at EZ Ride and asked for assistance. The PFA president explained that a recent car crash in February concerned the parents and some staff members.

### **Background to SRTS Safety Initiative**

A key element of the SRTS program is to engage community groups and local stakeholders to support and sustain the SRTS program after the travel plan is completed. Their role is to implement the School Travel Plan within the community. A River Plaza Elementary School Travel Plan Task Force was established and one meeting was held to collect information and build support for the program.

In February 2016, a car and a truck crashed right into the sidewalk area on Hubbard Avenue where children and bicyclists walk and ride to and from school every day. In 2009, a pedestrian was killed in a car crash on Hubbard Avenue right in front of the school. Both the driver and pedestrian were intoxicated.

On Wednesday March 23, 2016 the EZ Ride SRTS Coordinator was invited to attend the Parent Faculty Association (PFA) meeting to discuss SRTS activities and to answer parent and staff questions. Parents, PFA leaders, the Principal and faculty were present and indicated their concern about safety on Hubbard Avenue. Surveys were passed out to parents and an informal discussion of barriers to safe walking and traffic issues occurred to help the SRTS Coordinator understand the issues behind the safety initiative.

The group decided to invite County, Township and District/BOE leaders to join the PFA to conduct a walkability assessment and to consider applying for a SRTS infrastructure grant to make safety improvements on Hubbard Avenue. A date was scheduled after Spring Break to meet again and do the Walkability Assessment on May 11th. In the interim, another car crash



occurred on Hubbard Avenue in April 2016 during the afterschool hours when many children and parents were in the vicinity walking on the sidewalk on Hubbard Avenue. Parents were very upset and concerned that their children are at risk walking on Hubbard Avenue.

A list of the members of the Task Force who attended the Walkability Assessment and their roles are included in the table below.

#### River Plaza Elementary School Travel Plan Task Force

Organization	Role/Responsibility	Contact
River Plaza Elementary School	Program Activity and Implementation	Jessica L. Shaw <i>Principal</i> River Plaza Elementary School 155 Hubbard Avenue Red Bank, NJ 07701 732-747-3679 ext. 8500 <a href="mailto:shawj@middletownk12.org">shawj@middletownk12.org</a>
SRTS Champion	Program Activity and Implementation	Marguerite Stocker President, Parent Faculty Association Parent <a href="mailto:margueritestocker@yahoo.com">margueritestocker@yahoo.com</a>
Middletown BOE	Business Administrator	Amy Gallagher, CPA Board Secretary <a href="mailto:GallagherA@middletownk12.org">GallagherA@middletownk12.org</a>
Parent Faculty Association	Parent Member	Megan Cashion Parent PFA Member
Middletown School District	Asst. Superintendent	Mary Ellen Walker Asst. Super of Operations <a href="mailto:walkerm@middletownk12.org">walkerm@middletownk12.org</a>
Monmouth County	Engineering Project Implementation	James Bonanno Department of Planning Monmouth County One East Main Street P.O. Box 1255 Freehold, NJ 07728 (732) 431-7460 ext.7463 <a href="mailto:james.bonanno@co.monmouth.nj.us">james.bonanno@co.monmouth.nj.us</a>
The Township of Middletown	Enforcement, Community Policing	Anthony P. Mercantante, PP, AICP Administrator Director of Public Safety 1 Kings Highway Middletown, NJ 07748

		(732) 615-2010 <a href="mailto:amercant@middletownnj.org">amercant@middletownnj.org</a>
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The Township of Middletown	Engineering Project Implementation	Joseph E. "Ted" Maloney <i>Director of Public Works</i> <i>Township Engineer</i> 52 Kanes Lane Middletown, NJ 07748 (732) 615-2110 <a href="mailto:tmaloney@middletownnj.org">tmaloney@middletownnj.org</a>
EZ Ride - Transportation Management Association	SRTS Program Assistance, Community Resource, Safety Education	Lisa Lee <i>Safe Routes to School Coordinator</i> EZ Ride 144 Park Place East Wood-Ridge, NJ 07075 201-939-4242 <a href="mailto:llee@ezride.org">llee@ezride.org</a>

## 2. District & School Profile

A school profile for River Plaza School was developed using data from the School District website. Additional information was collected from city data, parent surveys, interviews and on-site visits.

The Middletown Township Public School District, in partnership with its resourceful and historically rich community, provides students with a rigorous and relevant education, rooted in the New Jersey and Common Core State Standards, motivating them to recognize and develop their full potential as responsible citizens, contributing to an ever-evolving global society.

### STATEMENT OF MIDDLETOWN DISTRICT BELIEFS

“We believe we must function as a united community to:

1. Meet every student’s unique and individual needs, in a safe and nurturing educational environment.
2. Prepare students for innovative opportunities in a rapidly evolving global society, in which technology is integral.
3. Inspire, engage, and challenge students and staff to make the commitment to become lifelong learners, both within and beyond the classroom walls.
4. Provide all students equitable opportunities for personal development by maintaining progressive resources.
5. Support the success of our children, who are our future”. [Excerpt from District website]

Middletown School District consists of twelve K-5 elementary schools, three middle schools for grades 6-8, and two four-year high schools. Four elementary schools feed into each of the three middle schools. The facilities vary in age, architecture, size, and student population. As of 2011-2012 there were 706 faculty staff members, and a student population of 6,981. Student demographics are shown in Table 1 below. The different ethnicities of students provide a diverse educational experience for pre-kindergarten to secondary school students as well as challenge for its teaching staff which is set at a 13:1 ratio. Table 1 on the following page outlines the student demographics of the Middletown School District.

**Table 1. Middletown School District – Student Demographics**

<b>Ethnicity</b>	
Caucasian	6,293
Hispanic Origin	340
Asian	157
Black	121
Other	70
<b>Gender</b>	
Male	3,562
Female	3,419
<b>Grade Level</b>	
Primary (Pre-Kindergarten – Grade 5)	2,052
Middle School (Grade 6 - 8)	2,490
High School (Grade 9 - 12)	2,439

### **Academic Performance**

The Middletown School District is classified by the NJ Department of Education as District Factor Group “GH,” towards the middle of the listing.

A District Factor Group (DFG) is an indicator of the socioeconomic status of citizens in school districts of New Jersey. DFGs were first developed by the New Jersey Department of Education in 1975 for the purpose of comparing student performance on statewide assessments across demographically similar school districts. This rating is based on neighborhood criteria such as poverty rate, incidence of crime and violence, and limited municipal resources due to low tax revenues. NJDOT has directed that SRTS programs in disadvantaged communities should be given high priority.

## **2.1. Middletown Health Profile – Monmouth County Community Health Assessment**

In 2015, the Health Improvement Coalition of Monmouth County worked with Meridian Health to conduct a Community Health Assessment of Monmouth and Ocean Counties. The Coalition invited representatives of health care providers, local health departments, nonprofit organizations and community members to a meeting on September 17, 2015 to participate in conducting the Community Themes and Strengths Assessment. Discussion groups identified the following themes affecting the communities within Monmouth County where they live or work:

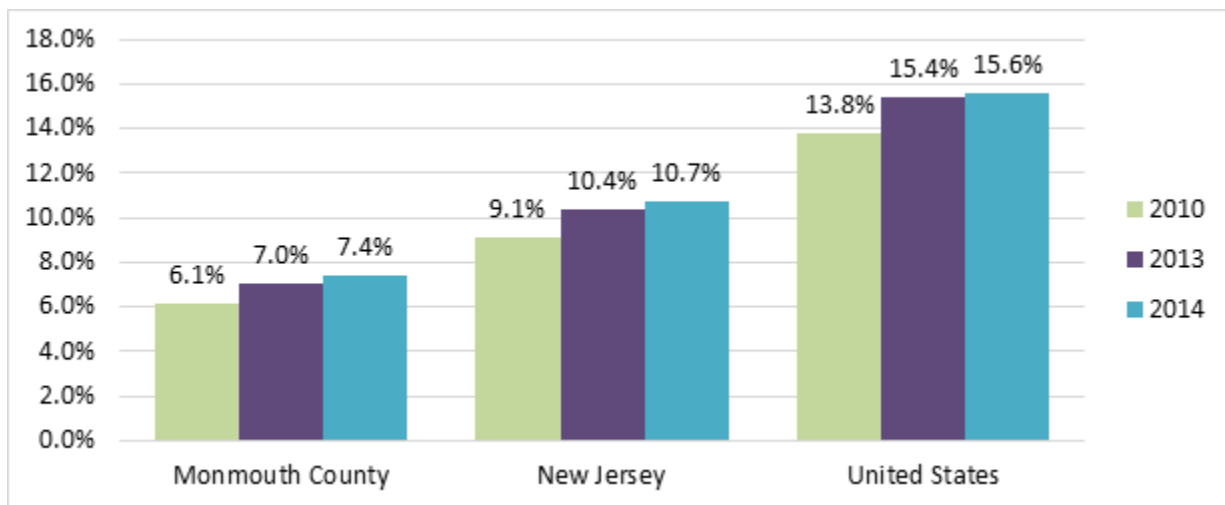
- Cost of living is high in Monmouth County. Some families struggle with paying for food, housing, caring for parents and lack of affordable insurance. This disparity is particularly pronounced with the undocumented population.
- There are distinct communities of “have and have-nots”. For affluent communities in the county, access to healthcare is much more available and convenient. In socioeconomically- disadvantaged communities, health care may not be accessible or available and is therefore viewed as less important as people may not be aware they have health issues.
- Community should provide the proper environment and promote policies that encourage health behaviors.
- Physical fitness is limited for kids (neighborhood safety, limited access to fitness activities, overuse of television and electronics).

## Understanding Social Determinants of Health

Conditions in the places where people live, learn, work, and play affect a wide range of health risks and outcomes. These conditions are known as social determinants of health. We know that poverty may limit healthy food access and coincide with unsafe neighborhoods and that more education is a predictor of better health. We also know that differences in health are striking in communities with poor social determinants of health such as unstable housing, low income, unsafe neighborhoods, or substandard education. By applying what we know about social determinants of health, we can not only improve individual and population health but also advance health equity.

*Centers for Disease Control and Prevention*

**Chart 1. Percent of Population Living Below 100% of Poverty Level**

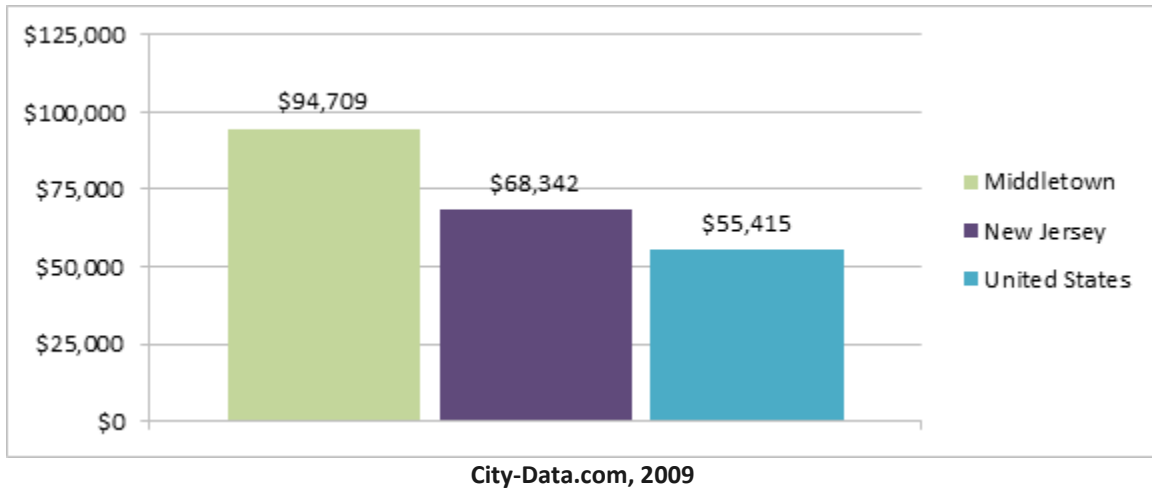


U.S. Census Bureau, American Fact Finder ACS DEMOGRAPHIC AND HOUSING ESTIMATES 2010-2014  
American Community Survey 5- Year Estimate

**In 2014, 7.4% percentage of Monmouth County's population was living below 100% of the poverty level**

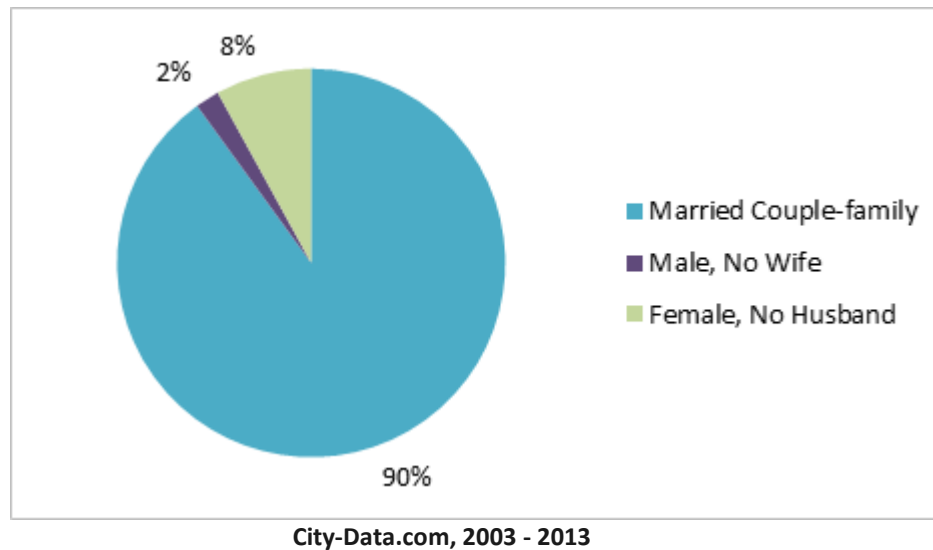
- Slight increase from 2010 to 2014
- Lower than state and national percentages

**Chart 2. Estimated Median Household Income - Middletown, NJ**



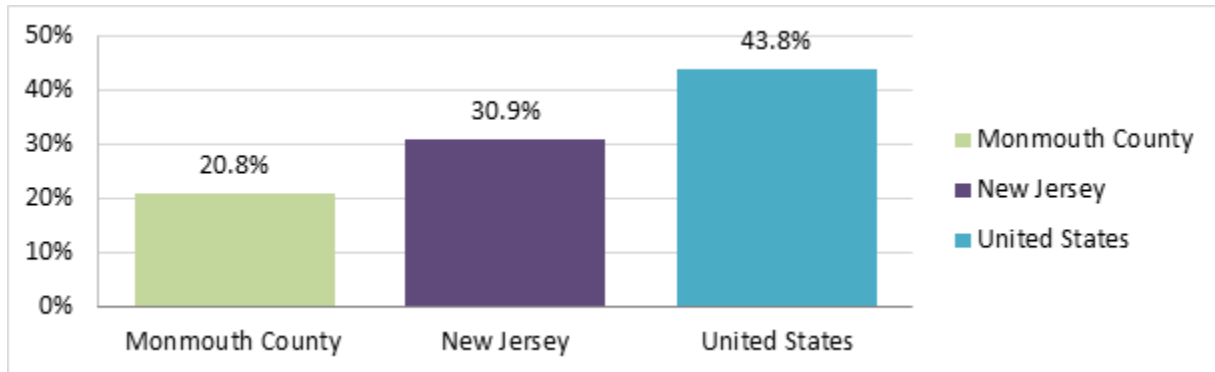
Data suggests that Middletown families earned more than 30k than the average American Household in 2009.

**Chart 3: Income Families by Type - Middletown, NJ**  
Percentage of Middletown family types



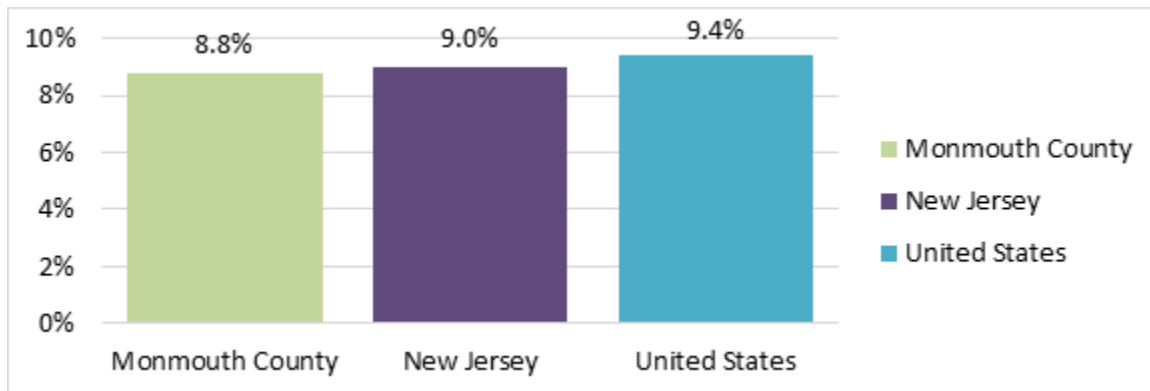
**Chart 4. Children in Poverty**

Percent of Children Living Below 200% of the Poverty Level, 2009-2013



Meridian Health 2011, 2015 Community Health Needs Assessment

**Chart 5: Current Prevalence of Adult Asthma in 2015**



Meridian Health 2011, 2015 Community Health Needs Assessment

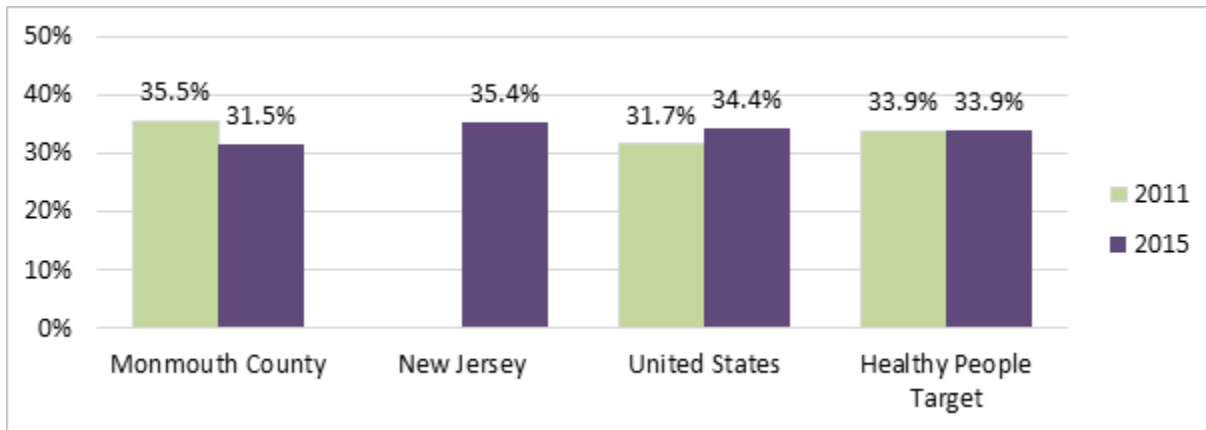
As of 2015, 10 percent of Monmouth County Children under the age of 18 suffer from asthma. These rates are much higher than neighboring Ocean County, and they are less favorable than the national rate of prevalence. Since 2011, the rates have increased in Monmouth County, yet in Ocean County, rates have decreased.

#### **Childhood Obesity**

In 2011, 28.7% of children ages 6-17 in Monmouth County were overweight or obese (85<sup>th</sup> percentile or higher), as per height/weight data collected from surveyed parents. In comparison 25.2% of Ocean County children ages 6-17 were overweight or obese, resulting in a total area overweight/obesity prevalence of 27.3%. The current childhood overweight/obesity prevalence is 24.6%. Findings are comparable by county and to the national prevalence. Childhood overweight/obesity prevalence is statistically unchanged over time.



**Chart 6. Percent of Adults at a Healthy Weight (BMI 18.5-24.9)**



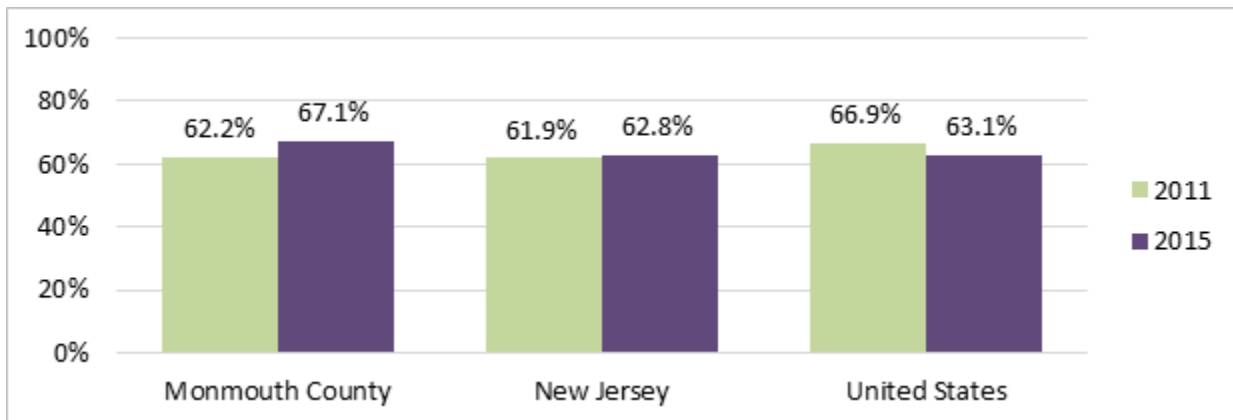
Meridian Health 2011, 2015 Community Health Needs Assessment

**31.5% of Monmouth County Adults believe they are at a healthy weight as per self-reported height and weight data; however, the actual BMI data does not support that.**

- Below state and national percentages
- Does not satisfy Healthy People 2020 Target
- There has been a significant decrease in healthy weight over time

**Chart 7. Prevalence of Overweight**

Percentage of Adults with BMI Greater than or Equal to 25

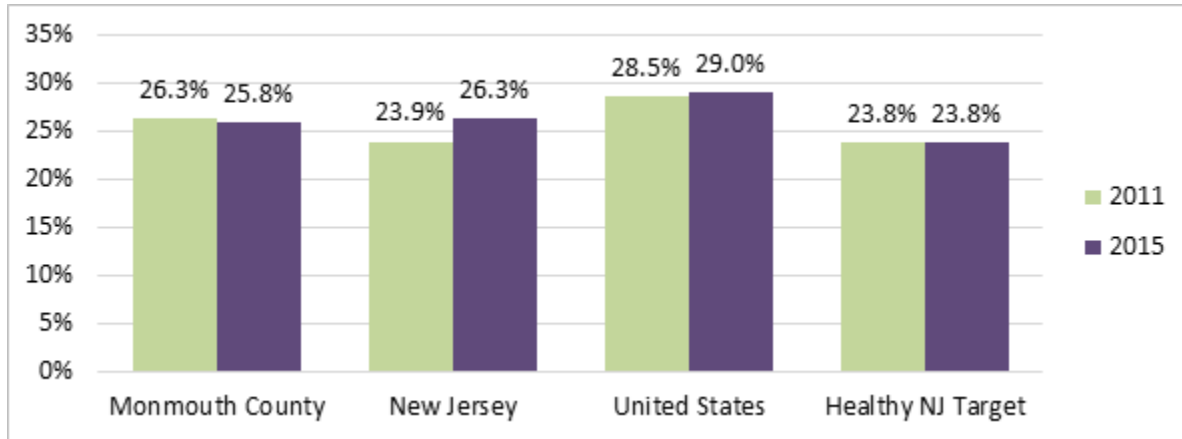


Meridian Health 2011, 2015 Community Health Needs Assessment

**67.1% Monmouth County adults have a BMI greater than or equal to 25**

- Higher than state and national prevalence
- Significant increase in Monmouth County since 2011

**Chart 8. Prevalence of Obesity**  
Percentage of Adults with BMI Greater than 30



Meridian Health 2011, 2015 Community Health Needs Assessment

#### **25.8% of Monmouth County adults are obese**

- Similar to statewide prevalence
- Lower than national prevalence
- Fails to satisfy Healthy NJ target of 23.8%
- More prevalent among ages 40-64, Blacks, and Hispanics

#### **Media Viewing Habits**

The American Academy of Pediatrics recommends that children spend a maximum of two hours per day on entertainment media like television, computers, and video games.

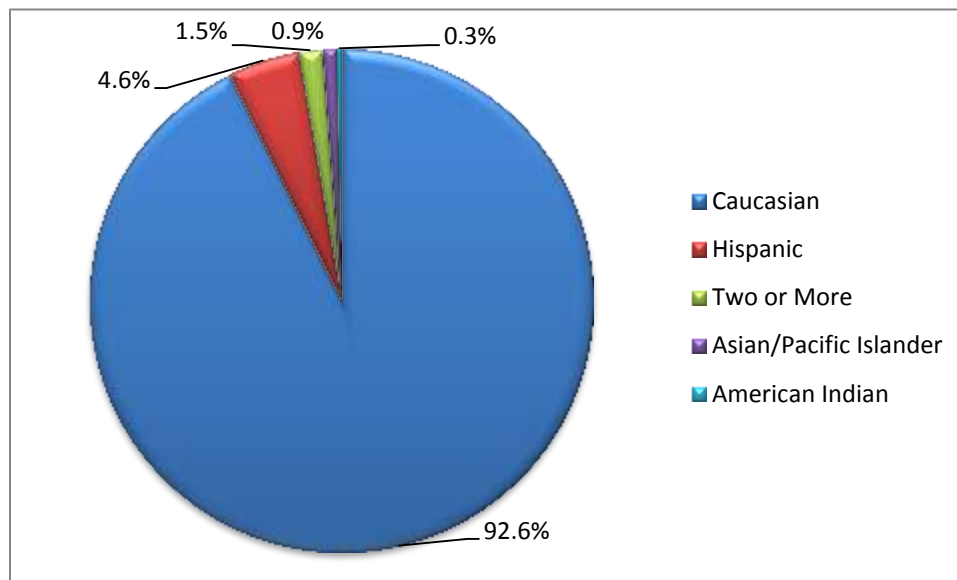
#### **Exercise**

The HHS 2008 Physical Activity Guidelines for Americans recommend that adults get at least thirty minutes of moderate to vigorous activity daily and that children get at least sixty minutes of moderate to vigorous physical activity daily.

## 2.2 River Plaza Elementary School

River Plaza Elementary School is a public elementary school located in Red Bank, NJ in the Middletown Township Public School District. It enrolls 325 students in grades 1 through 5. The average class ratio is 14.4 students to every teacher.

**Chart 9. Enrollment by Ethnic/Racial Subgroup 2014 - 2015**



New Jersey Department of Education 2014 – 2015 Performance Report. <http://www.nj.gov/education/pr/1415/25/253160160.pdf>

The number of students at Riverside Elementary School was 316 in 2011. The student population grew slightly to 325 in 2013-2014 and 2014-2015. As shown in Table 2 below, English is the predominant language spoken at home by 98.5 percent of the students. A smaller percentage of the students speak other languages at home such as Spanish, Filipino, and Hungarian testifying to the ethnic diversity of the student population.

**Table 2. Student Language Diversity (2014-15)**

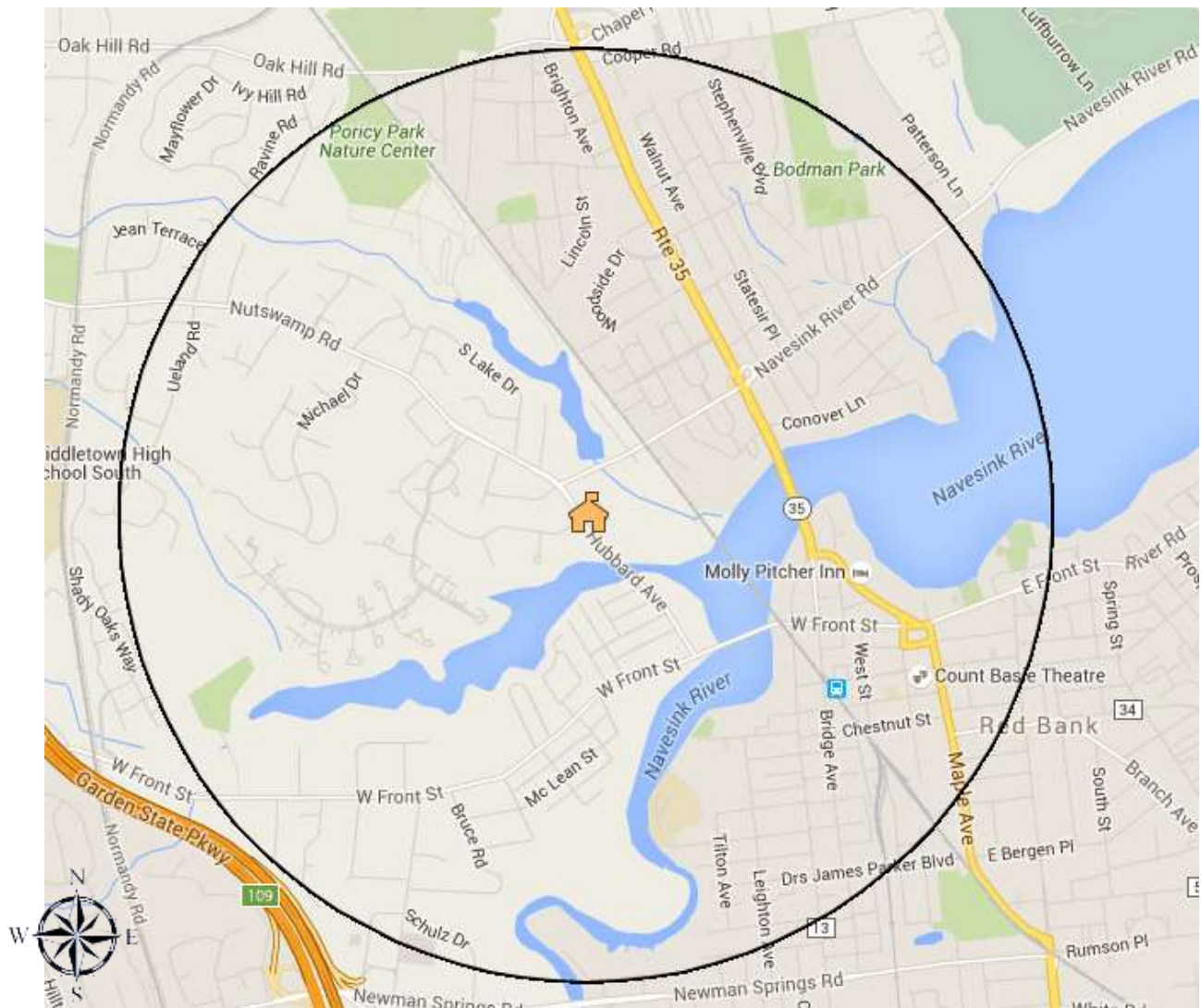
Language Diversity	
Percent of students who speak the following languages at home	
English	98.8%
Spanish	0.6%
Filipino	0.3%
Hungarian	0.3%

New Jersey Department of Education 2014 – 2015 Performance Report. <http://www.nj.gov/education/pr/1415/25/253160160.pdf>

### 3. Journey to School

In the 1960s, about 50 percent of children in the United States walked or bicycled to school. Over the last few decades, concerns about vehicle traffic, safety for the children, and longer commutes have forced more and more parents to drive their children to school. This results in more traffic on the road and less children who walk to school. Today, on average only about 15 percent of children walk or bike to school. Map 1 provides a two mile area of the residential area surrounding River Plaza Elementary School.

**Map 1: Two Mile Area Surrounding River Plaza Elementary School**



River Plaza Elementary School

### 3.1. Current Student Travel Environment

#### School Hours

The school day for students starts at 8:55 am and ends at 3:00 pm Monday through Friday. Students can attend free extended learning programs after school through the YMCA. There are no late busses provided after these programs.

#### Drop-off/Pick-up Procedure

Buses drop off and pick up at the front entrance on Hubbard Avenue. Families who use personal vehicles enter the school via the driveway on Hubbard Avenue and drop off students behind the school.

#### Crossing Guards

One is stationed at the corner of Hubbard Avenue and Park Place, a pick-up/drop-off point for buses. The other is stationed at in the front of the school and at the corner of Alexander Drive.

#### Student Travel Mode

In May 2016, the teachers at River Plaza Elementary School conducted a Travel Tally to document how the children in their classes get to and from school. Tallies were taken by teachers three times during one week. A total of 1709 trips were documented and the data was analyzed by the NJ Safe Routes to School Resource Center at the Voorhees Transportation Center, Rutgers University.

As shown in Table 3, the analysis found that about 8 percent of children walk to school, 27 percent rode the school bus to school, 55 percent were driven to school, 6 percent were carpooled to school, and 4 percent road their bicycles to school. The study shows 12 percent walked home, 30 percent took the school bus home, 44 percent were driven home, 9 percent carpooled home, and 4 percent rode their bicycles home.

**Table 3. Current Commute Mode**

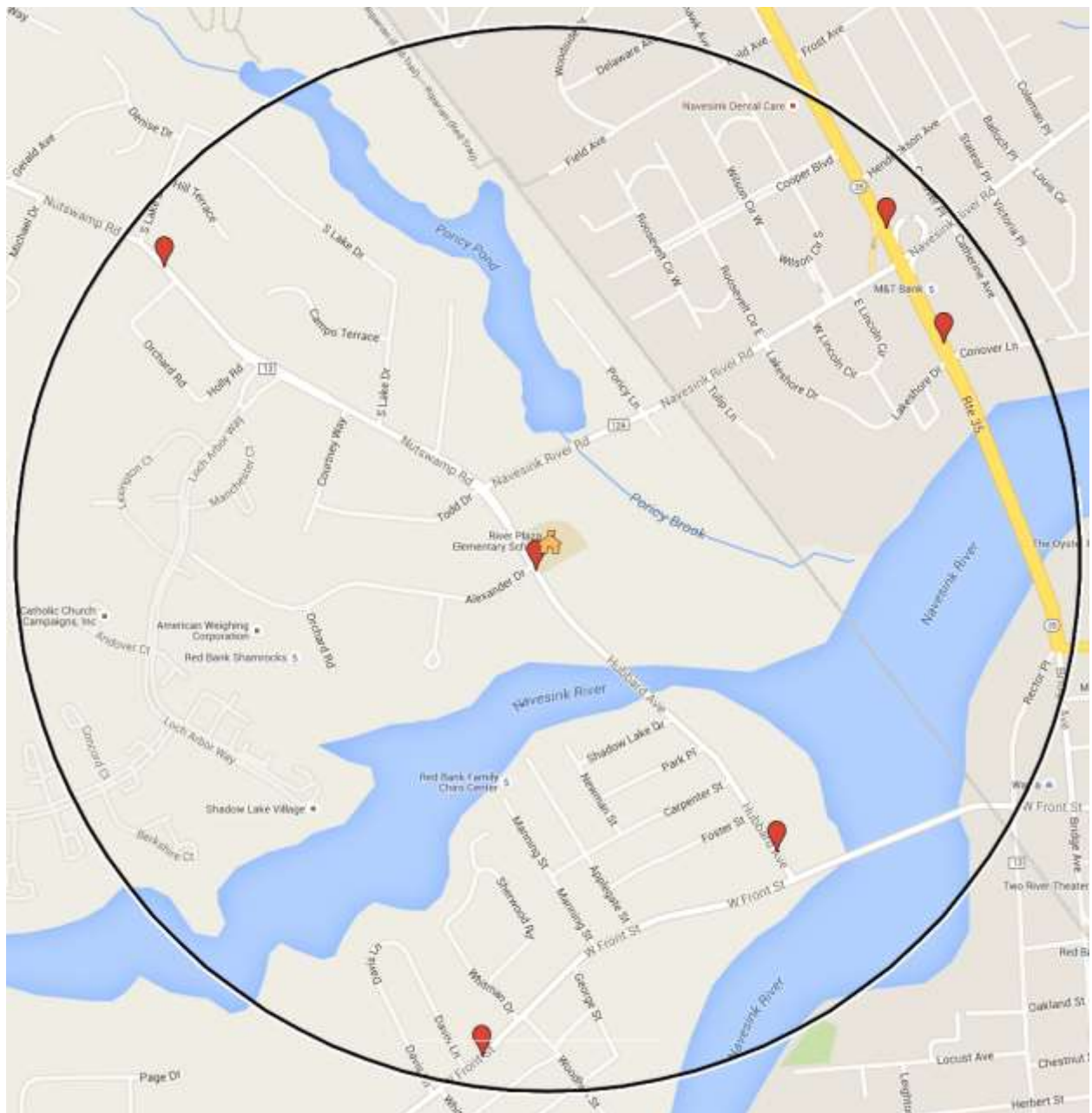
Mode	Arrival	Dismissal
Walk	8 percent	12 percent
School Bus	27 percent	30 percent
Driven in personal car	55 percent	44 percent
Public Transit	0 percent	0 percent
Carpool	6 percent	9 percent
Bike	4 percent	4 percent



### 3.2 Pedestrian Safety

EZ Ride conducted an analysis of the pedestrian-related accidents within a one-mile radius of the school over a 10-year period from 2003 to 2016 based on police incident reports. The reported incidents were plotted on Map 2.

**Map 2: Pedestrian Crashes within One Mile of River Plaza Elementary School, 2003-16**



**Table 4. Pedestrian Crashes by Age, In Middletown Township (2003-2015)**

Age	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total	Percent
0-10	2	1	0	1	1	0	0	0	1	0	0	0	0	6	2.5%
10-17	3	2	3	3	5	4	5	2	4	2	1	3	1	38	16.0%
18-35	7	3	5	3	5	6	3	7	8	4	5	5	2	63	26.5%
36-60	3	7	3	7	7	6	9	9	6	8	10	6	2	83	35.0%
60+	1	1	6	3	3	2	6	1	4	9	3	5	3	47	19.8%
Total	16	14	17	17	21	18	23	19	23	23	19	19	8	237	

For Middletown Township, there were 237 pedestrian crashes between the years 2003-15. On average there were approximately 20 pedestrian crashes per year. While the majority of the crashes (approximately 81 percent) involved pedestrians aged 18-60, approximately 18 percent (44) of the total incidents involved children in the 0-17 age group. In 2009, there was a pedestrian/motor vehicle crash and fatality on Hubbard Avenue right in front of the school.

### **3.3 Walkability Assessment**

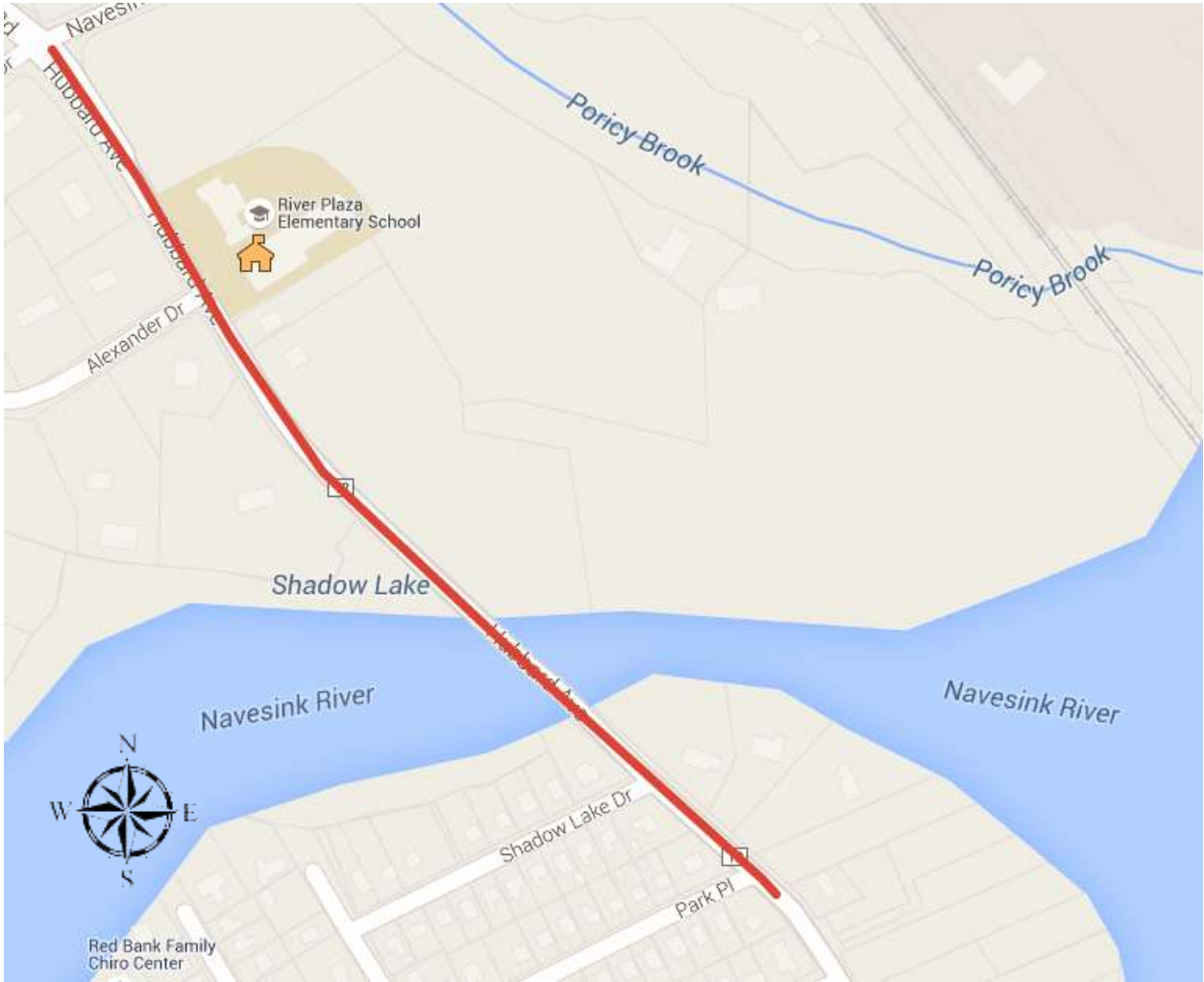
The SRTS Task Force conducted a walkability assessment of Hubbard Avenue on May 11, 2016. Hubbard Avenue is used by all students to get to the school. School children and residents of all ages and abilities walk in and through the neighborhood.

A Walkability Assessment evaluates the sidewalks, roads, crosswalks, lighting, signs, signals, and conditions of the environment along the walking route. A walkability assessment identifies pedestrian and bicycle infrastructure improvements that can be made and notes what is currently done well. The SRTS Task Force took photos of areas on the route. Comments and recommendations are listed with each photo and are summarized in the Action Plan at the end.

Map 3 on the following page shows the walking route which was assessed.



**Map 3: Assessed Walking Route**



River Plaza Elementary School



## **Alexander Drive and Hubbard Avenue in front of River Plaza Elementary School**

Photo 1: Street Crossing on Hubbard Avenue outside River Plaza Elementary School



### **Observations and Recommendations**

1. Curb Ramps are not ADA compliant
2. Double yellow line in center of road is faded heading North
3. Crosswalk striping a little faded
4. Drivers obeying Crossing Guard
5. Recommend SLOW SCHOOL ZONE marking on roadway to alert drivers to slow down
6. Recommend installing truncated domes
7. Recommend installing a traffic signal here to stop traffic and assist walkers to cross

Photo 2: School Driveway entrance on Hubbard Avenue



**Observations and Recommendations**

1. Driveway is cracked
2. Driveway is very wide which exposes students walking to more traffic
3. Recommend narrowing driveway and resurface driveway
4. Recommend to add a high visibility striped crosswalk across the driveway to alert cars

Photo 3: Hubbard Avenue



**Observations and Recommendations**

1. Sidewalk is narrower than standard width
2. Site of recent crash
3. Traffic is moving too fast on a downward slope
4. Recommend flashing sign to alert drivers to School Zone and to slow traffic
5. Recommend SLOW SCHOOL ZONE markings be added to roadway



Photo 4: Hubbard Avenue heading South towards Nutswamp Rd



**Observations**

1. The sidewalk is too narrow
2. Students are walking on sidewalk with bicyclists as there are no bike lanes

Photo 5: Streetscape heading South on Hubbard Avenue



**Observations**

1. Heavy traffic on this roadway
2. Traffic includes large trucks as well as automobiles
3. Large trucks directed to this road and not permitted to cross over bridge to Red Bank



Photo 6: Hubbard Avenue



**Observations**

1. Sidewalks are too narrow

Photo 7: Hubbard Avenue



**Observations**

1. The width of the sidewalk is too narrow
2. Debris and weeds have overgrown onto the sidewalk



Photo 8: Hubbard Avenue



**Observations**

1. A recent crash on Hubbard Avenue near the school damaged the fence
2. Nothing protects pedestrians along Hubbard Ave from traffic
3. Parents raise concerns about children walking because of the amount of traffic and the speed of cars



Photo 9: Hubbard Avenue



**Observations and Recommendations**

1. Traffic is moving too fast approaching school zone
2. Recommend installation of speed hump or speed table as no residences on this stretch of road to object to noise and will slow traffic
3. Recommend SLOW SCHOOL ZONE markings on roadway

**Hubbard Avenue**  
Photo 10: Hubbard Avenue



**Observations and Recommendations**

1. Road striping is faded
2. Center double yellow striping is nonexistent in this section of road
3. Traffic calming measures (speed hump or speed table) is recommended to slow speeding
4. No residences in this section of Hubbard Avenue
5. Speed limit sign is not facing drivers as it was struck by vehicle. Sign is overgrown by shrubs

Photo 11: Hubbard Avenue heading South towards Shadow Lake Drive



**Observations and Recommendations**

1. Site of recent crash 2 weeks prior to walkability assessment
2. Fencing and post bent and jagged sharp metal pole leaning towards sidewalk
  - a. Has been covered by a tee shirt and yellow caution tape
3. School bus in picture was speeding - traffic in general moving very fast
4. Recommend SLOW SCHOOL ZONE AHEAD pavement marking and signs
5. Wetlands on one side and greenway on other side and no residences
6. Recommend traffic calming measures installed here (speed hump, speed table or flashing slow sign)



Photo 12: Hubbard Avenue



**Observations**

1. Guard rail is damaged and rusted jagged edge protruding that needs repair

Photo 13: Hubbard Avenue



**Observations**

1. Sidewalk is worn and needs to be resurfaced
2. Curb is damaged from recent crash and need repair
3. Center yellow striping is faded

Photo 14: Hubbard Avenue



**Observations and Recommendations**

1. Homeowner's landscape barrier obstructs and narrows the sidewalk
2. Sidewalk is filled with leaves and yard debris
3. Recommend to send letter to homeowner to request they sweep the sidewalk
4. Recommend homeowner remove the obstruction as it is on City property



Photo 15: Hubbard Avenue approaching Park Place crosswalk



**Observations and Recommendations**

1. Yellow middle line striping is faded in several sections of roadway
2. Crosswalk is faded across Hubbard Avenue at Park Place
3. Some drivers are not stopping for pedestrians using crosswalk
4. Some drivers are distracted and not paying attention or looking out for pedestrians
5. Recommend high visibility restriping of crosswalk

Photo 16: Intersection of Hubbard Avenue and Park Place



**Observations**

1. Crosswalk is almost totally faded and needs high visibility restriping
2. Cars are speeding



Photo 17: Hubbard Avenue and Park Place



**Observations and Recommendations**

1. Curb ramps are not ADA compliant and are missing truncated dome pads
2. Crosswalk is barely visible to drivers across Hubbard
3. There is not a crosswalk across Park Place
4. This corner is a daily bus stop for Middle and High School students
5. Recommend to install traffic signal here to slow traffic and help walkers cross

Photo 18: Hubbard Avenue and Intersection at Shadow Lake Drive



### **Observations and Recommendations**

1. Cars are driving fast heading down incline or accelerating up the hill
2. Crosswalk at Shadow Lake Drive is completely faded and only indication of crosswalk is the sign in middle of street
3. Recommend to restripe crosswalk across Shadow Lake Drive and add high visibility striping
4. Shrubs are overgrown and obstructing sidewalk
5. Recommend owners be asked to trim hedges back from sidewalks
6. Recommend traffic speed study
7. Recommend speed limit be lowered to 25 mph as cars seem to be going faster than 35 mph and several recent crashes



Photo 19: Intersection of Park Place and Hubbard Avenue



**Observations and Recommendations**

1. Stop Bar is faded and needs to be repainted
2. Curb ramps are not ADA compliant and need truncated domes
3. Recommend crosswalk be painted across Park Place as this is a daily bus pick-up/drop-off area
4. Recommend school bus drop off zone pavement markings and sign to alert traffic

Photo 20: Park Place and Hubbard Avenue



**Observations and Recommendations**

1. Site of school bus pickup and drop off for Middle and High School busses
2. Suggest pavement markings and signage added to indicate students crossing and to slow traffic at this intersection of Hubbard Avenue
3. Curb ramps are not ADA compliant and need painted truncated domes
4. Recommend adding street lights for waiting students

Photo 21: Hubbard Avenue



**Observations and Recommendations**

1. Yellow middle line striping is faded in areas and needs repainting
2. Sign "Stop For Pedestrians in Crosswalk" is not in right location, broken, leaning against power pole, and needs to be replaced
3. Sidewalks here are in good shape



Photo 22: Hubbard Avenue heading north approaching Shadow Lake Drive



### Observations

1. Sign "Stop for Pedestrians in Crosswalk" is in the wrong place and should be closer to the intersection of Hubbard Ave and Shadow Lake Drive. It is being used to try to slow cars.
2. Sidewalks need to be resurfaced and are too narrow
3. As speeding traffic is definitely an issue here, the road heads downhill, and several crashes have taken place during inclement weather in the mile ahead approaching the school, it is recommended that the speed limit be reduced to 25 mph to prevent further car and pedestrian crashes or that traffic calming measures be implemented

Photo 23: Hubbard Avenue



**Observations**

1. Cyclist riding on wrong side of street
2. Recommend biking safety classes for students/residents at local schools
3. Debris on sidewalk can be a tripping/slipping hazard in inclement weather



Photo 24: Hubbard Avenue looking South



**Observations**

1. Roadway needs a bike lane
2. Several students were seen riding bikes on sidewalk or in roadway on wrong side of street



Photo 25: Hubbard Avenue



**Observations**

1. Fencing narrows the sidewalk by about 2 feet
2. The sidewalk section that is fenced is not a standard width
  - a. A wheelchair would have difficulty navigating the sidewalk
3. A recent car crash here has damaged the fence and the fence needs repair

## 4. Action Plan & Recommendations

The Safe Routes to School Action Plan is organized into the “Five E’s”: Education, Encouragement, Enforcement, Engineering and Evaluation. Additionally, each element of the Action Plan considers two parameters – time and cost as shown below. Together, they comprise a set of directions to help the community prioritize their action steps to increase safety for students. The tables below identify preliminary recommendations specific to the River Plaza Elementary School and its immediate area. To realize the full benefit of the SRTS program, it is suggested that this School Travel Plan be used to apply for SRTS grant funds to implement the action priorities.

Timeframe Definition	Cost Definition
<b>Short-term</b> = less than 3 months	<b>Low</b> = Less than \$2,000
<b>Mid-term</b> = between 3 to 6 months	<b>Medium</b> = between \$2,000 and \$10,000
<b>Long-term</b> = longer than 6 months	<b>High</b> = more than \$10,000

### 1. Education: Programs to educate students, parents and the public about safe walking and biking

Education Actions	Responsibility	Time Frame	Cost
Invite EZ Ride to provide SRTS Bicycle and pedestrian SAFETY Presentations	School, EZ Ride	Short-term, Mid-term, Long-term	No cost
Reinforce bus procedures via Robo Call twice a year annually	School	Short-term, Mid-term, Long-term	Low
Create and update Family Handbook that defines arrival and dismissal procedures with map and text that defines drop-off/pick-up areas, the rules and procedures for driving along local streets within school campus and school driveway	School, School Liaison,	Long-term	Low
Conduct “Drive Slow and Safe on Hubbard” Campaign twice a year. Notify parents/guardians and school staff by publishing information/updates in the Parent/Family Handbook, School Newsletters and on the school website	School, Town	Short-term, Mid-term, Long-term	Low
Ask Police Department to give a talk re driving safety tip cards to parents at Back to School Night of PFA meetings	Police, School, PFA	Short-term, Mid-term, Long-term	Low
Integrate walking and safety education into classroom curriculum	School	Short-term, Mid-term, Long-term	Low

Leverage Social Media to spread awareness of school zone and enforcement activities	School Action Team, PFA, Community	Short-term, Mid-term, Long-term	Low
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**2. Encouragement:** Programs to encourage or promote walking and biking

Encouragement Actions	Responsibility	Time Frame	Cost
Hold a student poster contest on Walking and Biking to school	School, EZ Ride	Short-term	Low
Circulate School Travel Plan Report via School website and PFA meetings	School, PFA	Short-term	Low
Host Bike/Walk to School Days throughout the school year	School Action Team. PFA,	Short-term, Mid-term, Long-term	Low
Participate in International Walk to School Day in October and National Bike to School Day in May, as well as NJ Walk and Bike to School Day in May	School Action Team, PFA, EZ Ride	Short-term, Mid-term, Long-term	Low
Utilize the school website to advance Safe Routes to School safety messages at least 1 week in advance	School Tech Coordinator	Mid-term, Long-term	Low

**3. Enforcement:** Activities to improve safety and security for those walking and biking to school

Enforcement Actions	Responsibility	Time Frame	Cost
Conduct bicycle registration at Back to School night	School, Police	Short-term, Mid-term, Long-term	Low
Investigate training parent volunteers to do Walking School Bus to have more parents who can watch out for kids' safety	School Liaison, PFA, Police	Mid-term, Long-term	Low
More crossing guard hiring and/or training	Police	Mid-term, Long-term	Medium-High
Ask County to conduct speed study along Hubbard Ave	County traffic, Police Department	Short-term, Long-term	Medium
Ask police to set up electric signs that post drivers speeds and remind people to not speed within school zone – do this 2x a year	Police Department, School Safety Liaison	Short-term, Long-term	Low
Ask town to post police on Shadow Lake Drive to give tickets to speeding cars on Hubbard Ave quarterly to deter speeding	Police, School, Town	Short term Mid term Long Term	Low

#### 4. Engineering: Infrastructure upgrades that improve walking and biking environment

Engineering Actions	Responsibility	Time Frame	Cost
Install bike racks and skateboard racks near school entrance	School	Mid-term,	Low
Post “School Zone” signs and paint “SLOW SCHOOL ZONE ” on roadways surrounding school	Town, DPW	Short-term Mid-term, Long-term	Low
Paint High Visibility Crosswalks at major intersections at Alexander Dr, Shadow Lake Dr and Park Place	County and Town DPW, Engineering, Police	Short-term, Mid-term, Long-term	Low
Implement traffic calming measures on Hubbard Avenue such as traffic signals at crosswalks, flashing SLOW signs, speed hump, or a speed table.	County and Town Engineering, Police	Mid-term, Long-term	Low
Post signs and paint area on roads to define Bus and Car drop off zones	School and Town DPW/Engineering, Police	Short-term, Mid-term, Long-term	Low
Investigate and ensure ADA compliancy of crosswalks and curb ramps	County and Town Engineering, Police	Mid-term, Long-term	Medium
Investigate and slow traffic speeds around the school and post 25 mph speed limit signs in place of 35 mph signs	County Engineering, Town Engineering, Police	Short-term, Mid-term, Long-term	Medium
Investigate installation of light fixtures around crosswalks at Shadow Lake Drive and Park Place and Alexander Dr.	County and Town Engineering, Police	Mid-term, Long-term	Medium
Install reflective bollards to improve pedestrian sight lines and help to shorten crossings	County and Town Engineering, Police	Mid-term, Long-term	High
Install sharrow markings on road, paint bike lanes, or install protected bike lanes separated from roadway on Hubbard Avenue	County and Town Engineering, Police	Mid-term, Long-term	Medium-High
Repair fence, signs and guardrail that was damaged by car crashes on Hubbard Ave.	County and Town Engineering, Police	Short-term, Mid-term,	Low

**5. Evaluation:** Efforts to monitor and evaluate progress towards the achievement of SRTS goals

Evaluation Actions	Responsibility	Time Frame	Cost
Continue to conduct student travel tallies every year to measure how effective the SRTS program has been to increase the number of students walking, biking or carpooling	School, EZ Ride,	Mid-term, Long-term	Low
Improve communications between school officials and families establishing a convenient mechanism to share information and get feedback	PFA, School Tech Coordinator	Short-term, Mid-term, Long-term	Low

### Conclusion

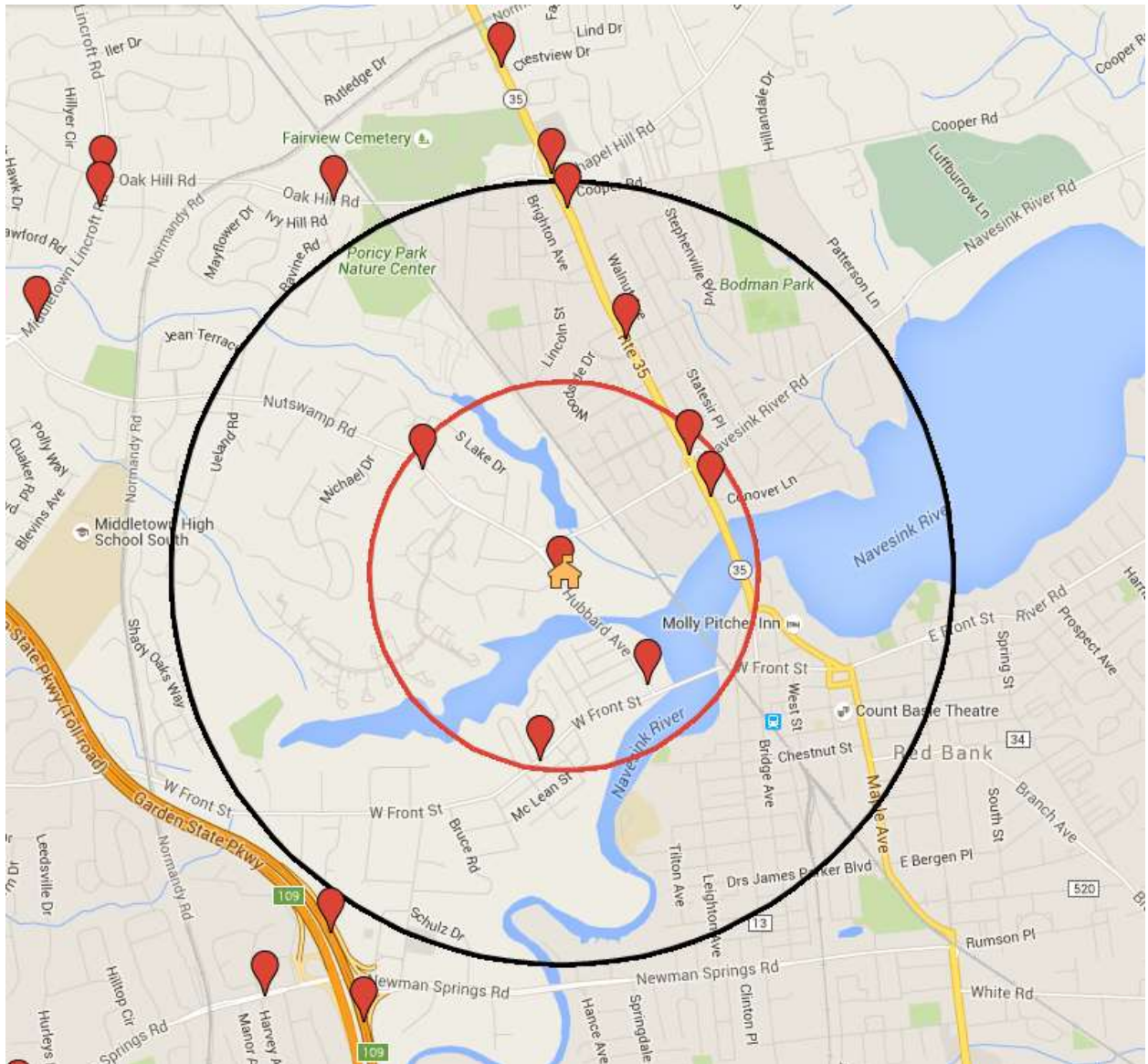
Community priorities around River Plaza Elementary School are safety for students, reducing the speed of traffic in the school zone along Hubbard Avenue, adding bike lanes, and improving narrow sidewalks. Repairing the crash damaged fence and sidewalks and striping crosswalks on Hubbard Avenue is a necessity and needs to be done as soon as possible as school crossing zones are not clear for drivers. The County should also consider adding in a traffic signal at some of the crosswalks to assist walkers and slow traffic. The school community's desire to collaborate to help protect students due to recent crashes is admirable and deserves support from the County and Town.

EZ Ride is proud to work with the community to improve safety and bring SRTS programs to the schools. EZ Ride has provided bike rodeos and pedestrian safety programs and this is the first School Travel Plan prepared for Middletown. It is hoped this report will be used to apply for SRTS infrastructure grants to make the sidewalks and neighborhood safer for students to walk and bike to the River Plaza Elementary School.



## Appendix A

### Crash Map



River Plaza Elementary



1 Mile Radius



2 Mile Radius

## Appendix B

### Typical Opportunities for Improvement



#### **LONG CROSSING DISTANCES**

Long crossing distances prolong the exposure time of pedestrians to motorists and make it difficult to see the pedestrian signal head on the other side of the road.



#### **PEDESTRIAN OBSTRUCTIONS**

Obstructions in the pedestrian right-of-way impede pedestrian movement and safety.



#### **LACK OF CURB CUTS**

Sidewalks without curb cuts are an obstacle to parents with baby carriages as well as people with disabilities.



#### **POOR MAINTENANCE**

Without maintenance pedestrians can trip, it can be a liability issue, and people with disabilities can have trouble negotiating the area.



## Typical Bicycle/Pedestrian Treatments



### SHARED-USE ROADWAY

Can be a safe for bicyclists when:

- Width is sufficient
- Speeds are low
- Traffic volumes are low



### BICYCLE LANE

- Provides a safe and comfortable environment for bicyclists
- An area that is delineated, but not separated from the roadway
- Typically 4' wide with a bicycle stencil



### SHARED USE PATH (TRAIL)

- Offers connections and opportunities not provided in the roadway system
- Can provide valuable connections and recreational opportunities
- Typically 8'-10' wide



### OTHER FACILITIES

- Bicycle Lockers
- Bicycle Racks on Transit
- Bicycle Racks
- Bicycle Safety Programs



## Typical Bicycle/Pedestrian Treatments



### SIDEWALKS

- A portion of the road ROW for the preferential or exclusive use of pedestrians
- Typically at least 5' wide
- Should be free of obstructions along its width and 80" high



### CROSSWALKS

- Provides a designated crossing point
- Helps provide more predictable pedestrian movements
- Alerts drivers to pedestrian areas



### SIGNAGE AND STRIPING

- Can help define pedestrian realm
- Provide visual cues for pedestrians and motorists
- Can augment other facilities



### AMENITIES AND AESTHETICS

- Lets pedestrians know area was designed for their use
- Helps provide a safe and comfortable environment
- Helps provide sense of "place"

## Typical Bicycle/Pedestrian Treatments



### **CURB EXTENSION**

- Reduces Vehicle Speeds
- Reduces Pedestrian Crossing Distance
- Increases Pedestrian Visibility
- Protects Parking Area & Prevents Parking Close to Intersection



### **FULL CLOSURE**

- Can be used to eliminate neighborhood cut-throughs
- Eliminates vehicular access
- Allows pedestrian and bicycle access and egress



### **MID-BLOCK CROSSING**

- Reduces Vehicle Speeds
- Increases Pedestrians Visibility
- Reduces Pedestrian Crossing Distance
- Connects Pedestrian Generators



### **RAISED MEDIAN GATEWAY**

- Provides Defined Entry
- Provides Cue to a Transition Area
- Aesthetically Pleasing
- Provides Pedestrian Refuge
- Reduction in Vehicle Speeds



## Typical Traffic Calming Devices



### **GATEWAY**

- Provides Defined Entry
- Provides Cue to a Transition Area
- Aesthetically Pleasing



### **CURB EXTENSION REDUCED TURNING**

- Reduces Vehicle Speeds
- Reduces Pedestrian Crossing Distance
- Increases Pedestrian Visibility
- Protects Parking Area & Prevents Parking Close to Intersection



### **RAISED**

- Reduces Vehicle Speeds
- Increases Pedestrians Visibility
- Reduces Pedestrian Crossing Distance
- Provides Pedestrian Refuge



### **BIKELANE**

- Reduces Vehicle Speeds
- Produces Designated Lane for Bicyclists
- Provides Additional Buffer for Pedestrians

## Typical Traffic Calming Devices



### **CURB EXTENSION**

- Reduces Vehicle Speeds
- Reduces Pedestrian Crossing Distance
- Increases Pedestrian Visibility
- Protects Parking Area & Prevents Parking Close to Intersection



### **MEDIAN REFUGE**

- Reduces Vehicle Speeds
- Reduces Pedestrian- Vehicle Conflict
- Reduces Pedestrian Crossing Distance
- Improves Aesthetics if well-maintained



### **MID-BLOCK CROSSING**

- Reduces Vehicle Speeds
- Increases Pedestrians Visibility
- Reduces Pedestrian Crossing Distance
- Connects Pedestrian Generators



### **Sidewalks and Access**

- Simplifies Crossing Movement
- Reinforces pedestrian priority
- Improves visibility
- Provides safe accessibility