New Jersey Safe Routes to School Program

## Florence Avenue Elementary School Travel Plan

1324 Springfield Ave, Irvington, NJ 07111



Prepared By:

EZ Ride 144 Park Place East Wood-Ridge, NJ 07075 (201) 939-4242 www.ezride.org

March 31, 2021



## DISCLAIMER

This publication was prepared with funding from the New Jersey Department of Transportation (NJDOT) and the Federal Highway Administration (FHWA). This document is disseminated under the sponsorship of NJDOT and FHWA in the interest of information exchange. NJDOT and FHWA assume no liability for its contents or use thereof.





**Table of Contents** 



U.S.Department of Transportation Federal Highway Administration

Executive Summary4	
1. Walking and Cycling to Health6	
1.1 The Challenge6	
1.2 The Program6	
1.3 The Team and Task Force7	
2. Community Profile12	
2.1 Irvington and Essex County Health Profile12	
2.2 District and Florence Avenue Elementary School	
3. Journey to School19	
3.1 Current Student Travel Environment22	
3.2 Pedestrian Safety24	
3.3 Walkability Assessment25	
4. Action Plan & Recommendations	

## Appendices

Appendix A: Design Guide42	
Appendix B: Funding Resources for Infrastructure48	

## **Executive Summary**

A Safe Routes to School (SRTS) Travel Plan is a resource to encourage and increase the number of students walking and 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 urges applicants to have an approved School Travel Plan in order to apply for a grant.

## 1. Goals

The goals of the Florence Avenue Elementary School Travel Plan are:

- a. Identify any issues that impact safety on the key travel routes used by students
- b. Provide a list of suggestions to improve the school travel environment (improve safety, reduce congestion) and encourage more students to walk and bike to school
- c. Categorize the suggestions in terms of cost and time needed to make repairs
- d. Implement solutions to encourage more students to walk and bike to school

## 2. Task Force

This School Travel Plan is the product of a valuable partnership. The Florence Avenue Elementary School SRTS Task Force consists of local stakeholders and is an important part of ensuring the sustainability of the SRTS initiative and enactment of the Action Plan.

## 3. Community Barriers to Health

- Cost of living is high in Essex County. Individuals have high rates of physical inactivity & there are increased violent crime rates in Essex County.
- Rates of uninsured and unemployed individuals, and children in poverty are higher than state averages (CountyHealthRankings.org)
- Air quality in the county is slightly lower compared to the state average.

## 4. School Travel Data

In January 2019, the Florence Avenue Elementary School teachers conducted a School Travel Tally to determine how students travel to and from school. Sixty-six percent of students walk to school; thirty-three percent of students are driven to school and one percent carpool. At dismissal, sixty-two percent of students walk home and thirty-eight percent of students are driven home. No children bike to school even though the school is surrounded by a residential area.

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

The Safe Routes to School Task Force conducted walkability assessments of the road conditions around the school on Monday November 19th, 2018 after school. Major intersections near the school which students use include: Springfield Ave. and Florence Ave., Springfield Ave. and 38<sup>th</sup> St., Springfield Ave. and 40<sup>th</sup> St. and Springfield Ave. and Lyons Ave.

Key opportunities for street improvement include: repairing or installing sidewalks, painting or repainting high visibility crosswalks, restriping low visibility crosswalks to high visibility crosswalks, installing or realigning truncated dome pads, installing curb ramps, repairing and/or installing pedestrian signal heads and lighting, adding School Zone signs or pavement markings, adding trash cans, and adding speed bumps.

#### 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 E's may be more urgently needed than others, so the school can execute the recommendations in any order they choose. 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 municipal roadway improvements.

Key Actions/Recommendations in Action Plan include:

- Ask Essex County & NJDOT to add shoulders/bike lanes, repaint crosswalks, add curb extensions, stop bars, ped. lighting, and traffic circle on Rt. 603/State Rt.124.
- Retrain crossing guards on safe crossing techniques, add second guard by school
- Add bike racks in front of school and no idling/double-parking signs around school
- Close street at intersection of Lyons Ave. & Springfield Ave. to reduce crosswalk distance and normalize the intersection, build a new pedestrian plaza with a drop-off point and benches where older students can be dropped off to walk to school.
- Add a drop-off area or circular driveway on Florence Ave for young children only.
- Ask NJ Transit to relocate bus stop one block west or east of school.
- Repair sidewalks and crosswalks near Bross Place
- Paint high visibility crosswalk striping at many intersections such as Bross PI., 38<sup>th</sup> St., and Elmwood terrace,
- Add "No Turn on Red" sign at the intersection between Lyons Avenue and Stuyvesant Avenue as the turning radius is wide
- Add bike lanes where possible so students can bicycle to school
- Install pedestrian lighting on corners so crossing students can be seen in the dark
- Ask County to add "Slow School Zone" or 25 mph street markings/signs on Springfield Avenue, and Twp. to add signs on Florence Avenue, and 38<sup>th</sup> Street.
- Ensure owners maintain sidewalks, trim shrubs and shovel snow to enable walking.
- Have Walk/Bike to School events and invite EZ Ride to provide annual safety talks

#### 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<sup>1</sup>. <sup>1</sup>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>2</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.

In the 2013 book, <u>Designing Healthy Communities</u>, Dr. Richard Stockton and Stacey Sinclair note that "walking to school is good for children's cognitive health and learning ability. It improves children's concentration, boosts moods and alertness, and enhances memory, creativity and overall learning".

The SRTS Program is a collaborative effort of multiple stakeholders that includes community members, elected officials, city planners, school staff and leaders and police

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

<sup>&</sup>lt;sup>2</sup> Walking and Biking to School, Physical Activities and Health Outcomes, Robert Wood Johnson Foundation

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.

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 and encourage 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. Main streets can benefit economically from well-maintained 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 resulting from 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 to help make walking and bicycling 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 and Task Force

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.

The actual implementation of the SRTS program and walkability assessment at the Florence Avenue Elementary School was undertaken by a group of organizations: the Bike and Pedestrian team at EZ Ride, the School District's PE & Health team, school administrators, Board of Education, Essex County DPW, Irvington Health Department, a VTC team member, and a representative from NJDOT.

#### EZ Ride and SRTS

In New Jersey, Transportation Management Associations (TMAs) have taken the lead in coordinating the implementation of the SRTS (Safe Routes to School) 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 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.

EZ Ride's Bike & Pedestrian/Safe Routes to School program has been involved with Florence Avenue Elementary School (FAES) for several years, dating back to 2015. Our collaboration began on April 16, 2015 with a Wellness Event at the school. The following year, the Bike & Pedestrian team came in to deliver a pedestrian safety presentation on November 7, 2016 and December 19, 2016. In 2017, Florence Ave. set out to achieve Silver level recognition. By completing pedestrian safety presentations and a student travel tally in October, and having 24 students participate in our safety poster contest that December, Florence was able to achieve their goal for 2017 SRTS recognition. During 2018, FAES began to collaborate with EZ Ride to bring bicycle safety presentations to students in May, and provided a city-wide PE Teacher training opportunity at the high school with the help of the Voorhees Transportation Center (VTC) on October 9<sup>th</sup>. Moving into November, EZ Ride and FAES collaborated with several other organizations such as the City Board of ED, City and County Department of Public Works, NJ Dept. of Transportation, and VTC to launch a Walk Audit.

In recognition of the School District and City's effort to improve pedestrian safety, Florence Avenue Elementary received the 2018 Gold Safe Routes to School Recognition Award and has maintained gold status the past few years holding annual bike and pedestrian safety talks for students. To meet the Gold Level recognition award criteria, the school identified an SRTS champion and EZ Ride did a Bicycle Safety Presentation in May 2018 followed by poster contest. This satisfied the requirement of holding at least two SRTS programs or events. The school also implemented an active transportation best practice of utilizing different doors for student dismissal to reduce traffic congestion near the school. The school also completed Travel Mode Tallies in January 2019. EZ Ride worked with the school and city stakeholders to do a walk audit and identify opportunities for infrastructure improvement to make walking and biking safer for students. Finally, EZ Ride developed this School Travel Plan for the area surrounding the school to highlight safety concerns to make it safer for students to walk and bike to school.

#### Health Department

The Irvington Health Department has a DOH grant to increase physical activity and healthy eating in the City. They have a Shaping Irvington coalition and the Health Officer was part of the Task Force to conduct the Walk Audit.

#### **Background to Walkability Assessment**

As part of EZ Ride's Safe Routes to School (SRTS) effort, the SRTS team did a walk audit around the school to assess walkability and safety for student and resident pedestrians and cyclists.

EZ Ride made a presentation after school to a group from the school, City, County and state on November 19th entitled "How to Conduct a Walk Audit". Members of the group then conducted a walk audit to assess the local walking routes that students use. The photo below shows the audit group reviewing the PowerPoint before going to do the audit.



A list of the Task Force members who attended or gave input into the Walkability Assessment and who are crucial to the implementation of the project are included in the table below.

## Florence Avenue Elementary School Travel Plan Task Force

Organization	Role/Responsibility	Contact
Florence Avenue Elementary School	Principal	Mary Michailidis 1324 Springfield Ave, Irvington, NJ 07111 (973) 399-6862 mmichailidis@irvington.k12.nj.us
Florence Avenue Elementary School	Vice Principal	Mohamed Baala 1324 Springfield Ave, Irvington, NJ 07111 (973) 399-6862 mbaala@irvington.k12.nj.us
Florence Avenue Elementary School	PE Teacher	Jordan Epstein 1324 Springfield Ave, Irvington, NJ 07111 (973) 399-6862 jepsteiny@irvinton.k12.nj.us
Department of Public Works Also in Board Of Education	DPW Deputy Director	Glen Viek 1 Civic Square W# 209 Irvington, NJ 07111 (973) 399-6652 Gviek@irvingtonnj.org
Health Officer	Department Director	Chris Hellwig 1 Civic Square W, Irvington, NJ 07111 (973) 399-6652 chellllug@irvingtonnj.org
Essex County DPW	Engineer	Rick Valderrama 900 Bloomfield Ave, Verona, NJ 07044 (973) 226-8500 rvalderrama@essexcountynj.org
EZ Ride - Transportation Management Association	SRTS Program Assistance, Community Resource, Safety Education	Lisa Lee Safe Routes to School Coordinator 144 Park Place East Wood-Ridge, NJ 07075 (201)-939-4242 <u>llee@ezride.org</u>
EZ Ride - Transportation Management	SRTS Program Assistance, Community	Victoria Alizo SRTS Assistant Coordinator 144 Park Place East Wood-Ridge, NJ 07075

Association	Resource, Safety Education	(201)-939-4242 valizo@ezride.org
EZ Ride - Transportation Management Association	SRTS Program Assistance, Community Resource, Safety Education	Eric Angeles SRTS Assistant Coordinator 144 Park Place East Wood-Ridge, NJ 07075 (201)-939-4242 eangeles@ezride.org
EZ Ride - Transportation Management Association	SRTS Program Assistance, Community Resource, Safety Education	Priti Dhungel SRTS Assistant Coordinator 144 Park Place East Wood-Ridge, NJ 07075 (201)-939-4242 pdhungel@ezride.org
New Jersey Department of Transportation William Riviere	Office of Bicycle and Pedestrian Programs	William Riviere Principal Planner, NJDOT Office of Bicycle & Ped. Programs 1035 Parkway Avenue PO Box 600 Trenton, NJ 08625-0600 <u>609-530-4646</u>
Alan M. Voorhees Transportation Center/SRTS Resource Center Edward J. Bloustein School of Planning and Public Policy, Rutgers The State University of New Jersey	Web- based resources, Technical Assistance, SRTS Recognition, Helpdesk, SRTS Tools, Tips and Training	Sean Meehan Senior Research Specialist Voorhees Transportation Center Bloustein School 33 Livingston Avenue New Brunswick, New Jersey 08901 (848)-932-2376 smeehan@ejb.rutgers.edu

#### 2. Community Profile

#### 2.1 Irvington & Essex County Health Profile – Community Health Needs Assessment

Essex County is the third most populated county in the state of New Jersey. Due to its dense population and proximity to New York City, cost of living in the county is high. There are many different health disparities that exist as related to the dense population, and large cities in the county. According to countyhealthrankings.org, rates of individuals who are uninsured and unemployed, and children living in poverty, for example, are higher than state averages. Individuals within Essex County have unusually high rates of sexually transmitted infections (STIs). Physical inactivity and higher violent crime rates are other issues that are pertinent in Essex County. Furthermore, air Quality County wide is slightly lower in quality as compared to state averages. In other words, the top key issues include STIs, physical inactivity, uninsured and unemployed individuals, children living in poverty, violent crime rate, and air pollution (slightly higher).

#### **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. Poverty may limit healthy food access and coincide with unsafe neighborhoods. Providing more education to people within these areas can lead to better overall health for residents. 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 social determinants of health, individual and population health not only improves but also advances health equity.

Centers for Disease Control and Prevention



**Chart 1: Percent of Persons Living in Poverty** 

Chart 1 shows that Irvington, at 19 percent, has a considerably higher percentage of

Source: Census.gov. 2019

persons living in poverty compared to the county and state.



Chart 2: Estimated Median Household Income – Irvington, NJ

Source: Census.gov 2019

The chart shows that the median household income of Irvington is low as compared to the median household income of both the county and the state.



#### **Chart 3: Prevalence of Adult Asthma**

Source: Citydata.com, http://www.city-data.com/health-nutrition/Irvington-New-Jersey.html

Approximately 10 percent of Irvington residents have asthma. This is slightly greater than the county rate and state rate. Promoting walking and biking versus bussing and driving to school can reduce air pollution and make it easier for residents with asthma to breathe.





Source: Citydata.com, http://www.city-data.com/health-nutrition/Irvington-New-Jersey.html 2012-16

Almost twelve percent of people living in Irvington have been told by a doctor or health professional that they have diabetes.





Source: Citydata.com, http://www.city-data.com/health-nutrition/Irvington-New-Jersey.html 2012-16

Twenty-five percent of people living in Irvington have been told by a doctor or other health professional that they have hypertension (high blood pressure).



Chart 6: Rate of High Cholesterol

Source: Citydata.com, http://www.city-data.com/health-nutrition/Irvington-New-Jersey.html,

About seventeen percent of people in Irvington have been told by a doctor or other health professional that their blood cholesterol level is high. The County rate is about eighteen percent and the state rate is almost nineteen percent.

Increasing levels of physical activity and encouraging activities such as walking and biking can help students and residents lose or maintain weight and lower their blood sugar, blood pressure, and blood cholesterol levels and can help with long term health.



Chart 7: Overweight & Obesity Rate

Source: Citydata.com, http://www.city-data.com/health-nutrition/Irvington-New-Jersey.html

60.8 percent of people living in Irvington are obese or overweight which is higher compared to the state but slightly less than the county rate.



Source: Citydata.com, http://www.city-data.com/health-nutrition/Irvington-New-Jersey.html

The average body mass index (BMI) in Irvington is 30.2 which is higher than the state average.

#### 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.





Source: Citydata.com, http://www.city-data.com/health-nutrition/Irvington-New-Jersey.html

Sixteen percent of Irvington residents' work involves vigorous-intensity activity that causes large increases in breathing or heart rate, like carrying or lifting heavy loads, digging or construction work for at least 10 minutes continuously.

Thirty one percent of people do moderate-intensity activities at work that causes small increases in breathing or heart rate such as brisk walking or carrying light loads for at least

10 minutes continuously. Thirty five percent walk or bicycle for at least 10 minutes continuously to get to and from places.

Twenty four percent do vigorous-intensity sports, fitness or recreational activities that cause large increases in breathing and thirty seven percent do moderate-intensity sports, fitness or recreational activities for at least 10 minutes.

People living in Irvington spend six hours sitting on a typical day. They usually sit and watch TV or videos for about three hours per day. They use a computer or play computer games outside of work or school for 1.3 hours per day.

## 2.2 District & Florence Avenue Elementary School Profiles

A school profile for Florence Avenue Elementary was developed using data from the School District website, the Elementary School Website, the National Center for Education Statistics, and the New Jersey State Education Department website.

Total Students 7,841	
Ethnicity	# of Students
Black or African-American alone	5,959
Hispanic or Latino	1,779
White	24
Asian	31
Native Hawaiian or Pacific Islander	16
American Indian or Alaska Native	16
Two or More Races	16
Gender	# of Students
Male	4,077
Female	3,763
Non-Binary/Undesignated Gender	1
Grade Level	# of Students
Primary (Pre-Kindergarten – Grade 4)	4,139
Middle School (Grade 5 - 8)	2,145
Llink Calcal (Orada 0, 12)	
High School (Grade 9 - 12)	1,557

Table 1: Irvington Public School District – Student Demographics

Source: NJ School Performance Report, 2019-20

#### District Academic Performance Ranking

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. According to NJ.gov, the

1975 DFG report summarized research indicating that student performance is affected not only by the quality of the educational services received in the school building, but also by students' background characteristics, particularly those relating to their parents. 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.

The Irvington School District has been classified by the NJ Department of Education as District Factor Group "A," which indicates a low socioeconomic status and thus a disadvantaged community.

#### **Florence Avenue Elementary School**

The mission of Irvington Public Schools is to inspire and instruct all students to think critically, creatively, and responsibly, to embrace diversity and to pursue their dreams with purpose.

Student expectations at Florence Avenue School during COVID-19 are excellent attendance, proper classroom behavior, paying attention and participating, completing assignments on time, completing iReady reading and math assignments, practicing good hygiene, washing hands frequently, wearing a mask, and being responsible for your education.

Florence Avenue Elementary School is a public elementary school located in Irvington, NJ. The school enrolled approximately 684 students in grades K through 5 in 2019-2020.



## Chart 10: Percent Student Ethnicity

Source: NJ School Performance Report (2019-20)

As shown in Table 2 below, Spanish is the predominant language spoken at home by approximately 43.7 percent of the students at Florence Avenue Elementary School. English is second with approximately 29.5 percent of students speaking it at home. Haitian is third with approximately 21.9 percent of students speaking it at home, and 3.8 percent speak other languages, and 1 percent speak French at home.

Table 2: Student Language Diversity (2019-20)					
Language Diversity					
Percent of students who speak the following languages at home					
Spanish	43.7%				
English	29.5%				
Haitian	21.9%				
Other	3.8%				
French	1.0%				

Table 2: Student Language Diversity (2019-20)
Languago Divorcity

Source: NJ School Performance Report, 2019-20

#### 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 contributed to parents driving their children to school. This results in more traffic and fewer 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 surrounding area.



Map 1: Two Mile Area Surrounding Florence Avenue Elementary School

Source: Google Earth

#### 3.1. Current Student Travel Environment

The school is located at the intersection of Florence Avenue and Springfield Avenue. Springfield Avenue, or Essex County Route 603, is a main thoroughfare populated by many businesses and runs through a residential area. It is a county road that extends through Newark, Irvington and becomes State Route 124 at the border of Irvington and Maplewood near Becker Terrace. A New Jersey Transit bus route runs along Springfield Avenue, and a bus stop is located in front of the school. Many students walk along Springfield Avenue or must cross it to get home. Springfield Avenue has a great deal of vehicle traffic and many people use it as a shortcut to avoid traffic on the Garden State Parkway or Interstate 78. Florence Avenue is an Irvington Township road, while Chancellor Avenue and Stuyvesant Avenue are Essex County roads.

38<sup>th</sup> Street and 40<sup>th</sup> Streets are across the street from the school, and both roads are offshoots of Springfield Avenue with many cars speeding. There is a concern as many students use these streets to walk to and from the school. Map 2 provides a closer look at the immediate area near the school.



#### Map 2: Area Surrounding Florence Avenue School

Source: Google Maps

#### **Florence Avenue Elementary School**

#### **School Hours**

The school building opens at 7:30 am. The school day for students starts at 8:40 am and ends at 2:50 pm Monday through Friday. There are special programs that run from 3 pm to 4 pm and a separate afterschool program that runs from 2:50 pm to 6:00 pm.

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

The dismissal process uses four different exits: doors 3 and 5 on the parking lot side are used by grades four and five. Door 2 on Florence Avenue side is used for grades two and three to exit. Kindergartners and First graders are signed out of their classrooms and exit the building via the Main Entrance or Door 1. That is, parents wait outside the front entrance at 2:50 PM to meet and sign out their children directly from the classroom teacher.

#### **Crossing Guards**

Two crossing guards are stationed at Florence Avenue and Springfield Avenue near the school's entrance and at the corner of Sanford and Springfield Avenue.

#### **Student Travel Mode**

In January 2019, the teachers at Florence Ave 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 522 trips were documented and the data was analyzed by the NJ Safe Routes to School Resource Center at the Voorhees Transportation Center, Rutgers University.



Morning and Afternoon Travel Mode Comparison

Table 3: 0	Current Commute	Mode
------------	-----------------	------

	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Morning	522	66%	0%	0%	33%	1%	0.4%	0%
Afternoon	304	62%	0%	0%	38%	0%	0%	0%

Percentages may not total 100% due to rounding.

Source: NJ Safe Routes to School Resource Center at the Voorhees Transportation Center

As shown in Table 3, the analysis showed that about 66 percent of children walk to school, 33 percent are driven in a personal car, 1 percent carpool, 0.4 percent use public transit, and nobody bikes to school. On the way home, 62 percent walk and the remaining 38 percent are driven home. There is no school bus service.



#### 3.2 Pedestrian Safety

EZ Ride's SRTS team conducted an analysis of the pedestrian-related crashes by age group in Irvington, NJ. This data can be found in Table 4 below. Map 3 plots these crashes, specifically within a one-mile radius of the school over a 5-year period from 2015 to 2019. This data is based on police incident reports.

	2015	2016	2017	2018	2019	Total	Percent
0-9	10	6	15	6	15	52	7.1%
10-19	21	23	18	17	30	109	15%
20-29	12	22	29	27	19	109	15%
30-39	18	23	14	13	23	91	12.5%
40-49	16	17	17	20	28	98	13.5%
50-59	25	14	18	25	24	106	14.6%
60-69	7	13	7	17	11	55	7.5%
70+	2	6	8	8	13	37	5.1%
Age not reported	11	17	9	16	18	71	9.7%
Total	122	141	135	149	181	728	100%

#### Table 4: Pedestrian Crashes by Age

Source: Safety Voyager 2015-2019

Table 4 data shows that more than 20 percent of the pedestrian crashes in the area involved children and youth under age 20 which is a concern.



Map 3: Pedestrian Crashes within One Mile of Florence Avenue Elementary School

Source: Safety Voyager 2015-2019



Map 3.1: Pedestrian and Bicyclist Crashes in Irvington Township (2015-2019)

Source: Safety Voyager, 2015-2019

For Irvington, there were 518 crashes involving pedestrian and cyclists between the years 2015-2019. On average, there were 104 pedestrian/bicyclist crashes per year. Map 3.1 shows that a majority of crashes occurred on Springfield Avenue, which is also known as County Rt. 603 or State Rt.124.

#### 3.3 Parent Survey on Walk and Bike Barriers

The school sent out New Jersey Safe Routes to School surveys for parents with questions on Safety, Road Crossings, School Policies, and Parents' Attitudes. There were four questions asked about safety related to sidewalks, bike facilities, concerns related to crosswalks, curb ramps, and traffic near school. Other questions were related to concerns of parents related to school policies such as arrival /dismissal, after school activities etc., and how comfortable they feel allowing children to walk and bike to school.

The parents were mostly concerned about uneven sidewalks near schools, mostly along Florence Avenue. They also had concerns about congestion and speeding traffic on Florence Avenue during arrival and dismissal, a lack of parking for parents, cars double parked in front of the school, speeding cars on Springfield Avenue, and a lack of bike lanes along Springfield Avenue.

#### 3.4 Walkability Assessment

The SRTS Task Force conducted a walkability assessment of three routes around Florence Avenue Elementary School on Monday, November 19<sup>th</sup>, 2018 after dismissal. Prior to the assessment, EZ Ride team members presented to the Walkability Assessment Team on the importance of this assessment, how to conduct this assessment, and key issues to document. Once the teams finished their assessments, they regrouped and debriefed the taskforce on what issues were discovered, some potential solutions to those issues, and positive notes on driver behavior, infrastructure, and/or pedestrian behavior.

A Walkability Assessment evaluates the sidewalks, roads, crosswalks, lighting, signs, signals, and walking environment along a predetermined route. A walkability assessment identifies road 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 4 shows the walking routes which were assessed.



Walking on Bross Place -Sidewalk Condition



Map 4: Main Walking Routes around Florence Avenue Elementary School

Route 1 (1.2 miles)

#### 1. Good Practices



#### Route 1 (Red)

- High Visibility Crosswalk on Springfield Avenue in front of Florence Avenue Elementary School
- Truncated Domes present which fulfills ADA requirement
- Crossing Guards at Florence & Springfield and Sanford & Springfield

#### Route 2 (Yellow)

- High visibility crosswalk at intersection of 40<sup>th</sup> St. and Chancellor
- Truncated Domes present which fulfills ADA requirement

#### Route 3 (Blue)

- Truncated Domes present at most of the intersections

#### 2. Common Problems 2.1 Intersection Unmarked Crosswalks and Faded Crosswalks







## Route 1 (Red)

- -Elmwood Ave & Elmwood Terrace
- -Wilson PI. & Bross PI.
- -Durand Pl. & Bross Pl.
- -No high visibility crosswalk- 38<sup>th</sup> Street
- Intersection in front of school needs two guards to handle the traffic
- Crossing guards aren't using stop signs

## Route 2 (Yellow)

-Prospect & Stuyvesant -40<sup>th</sup> & Prospect

## Route 2 (Yellow)

-40<sup>th</sup> & Chancellor -40<sup>th</sup> & Wagner -40<sup>th</sup> & Springfield Avenue

## Route 3 (Blue)

- -Tiffany PI. & Franklin Terrace
- Elmwood Ave. & Headley Terrace
- Headley Terrace & Springfield Ave
- Crossing guard is not using stop sign

#### 2.2 SIDEWALKS Sidewalk – Uneven, Narrow and Littered



#### Route 1 (Red)

- Bross Place has very narrow sidewalks with large trees.

- Tree roots have raised slate crosswalk tiles and caused sidewalk to be very uneven. Leaves and garbage are present

-38<sup>th</sup> Street has very poor sidewalk upkeep next to apartment



#### Route 2 (Yellow)

- 40<sup>th</sup> Street slate sidewalks dangerous in bad weather as the slate slabs are slippery in rain and snow

- Sidewalk damaged and the crosswalk at Prospect Avenue is faded

- 40<sup>th</sup> Street sidewalk severely damaged from tree growth and an electric pole obstructs the sidewalk.

- 40<sup>th</sup> Street sidewalk is cracked and littered with garbage along the route



# Sidewalks–Uneven, Narrow and Littered

Route 3 (Blue)

#### Florence Avenue

- Slate sidewalks are cracked
  Sidewalks uneven which leads to tripping hazard, misaligned dome pads
- Signal poles in middle of sidewalk
- No garbage cans, lots of trash

#### Headley Terrace

Standing water and garbage issues at curbs
Curbs are broken and damaged
Need additional speed bump closer to Florence



#### 2.3 Street Lights Street Lighting



#### 2.4 Other Other Issues



#### Route 1 (Red)

- Clinton and Prospect is known to be dangerous in terms of gangs selling drugs and stolen bikes, etc.

 Parents are double parking in front of the school, Springfield Avenue and Florence Avenue, blocking bus stop
 When NJ Transit bus stops, it blocks view of drivers who may not see children crossing. May be good to move the bus stop away from the front of the school to the block between Florence Ave. and Headley Terrace
 38<sup>th</sup> Street is a one-way street and speeding is occurring as kids walk home after school

## Route 2 (Yellow)

Crossing Guard at Florence Avenue and Springfield Avenue was not crossing students properly and it is too large and busy of an intersection for one guard. Guard was not using stop paddle.



## Route 3 (Blue)

- Headley Terrace has standing water issues

Corner of Headley & Florence had strong gas and chemical fumes
90 Headley Terrace has driveway issues

- People are parked at the NJ Transit bus stop in front of the school

## 3. Proposed Engineering Improvements

3.1 Proposed Plaza at Springfield Avenue & Lyons Avenue





## Existing

The two lanes merging from Lyons Ave onto Springfield Ave are confusing for drivers (one is two-way and the other is one way) and expose pedestrians and turning traffic to a greater risk of being hit. The one way lane of Lyons Avenue can be closed and a plaza can be made at the intersection between Springfield Avenue and Lyons Avenue which will also create a more standard type of intersection for drivers and pedestrians.

## Proposed

Dedicating this space for a public plaza will eliminate the long crosswalk at Lyons Avenue and create a more normal intersection for drivers. This will create a pleasant place for pedestrians to rest/enjoy the area. Planters and trees can be situated to provide greenery in the commercial area. This plaza can also be used as a Kiss and Walk Drop off Zone. It is 0.2 mile (4 minutes) from the school which is a comfortable walking distance from school and will give kids the chance to get exercise. This can be done as a demo/pilot first with paint.

## 3.2 Proposed Additions to Front of School



#### Proposed

Benches, bike racks, pedestrian lights, green planters and more trash cans improve safety/aesthetics and provide space for bike parking and waiting parents. The bus stop sign can be replaced by 'No Idling' sign. The NJ Transit bus stop should be moved a block away as buses obstruct drivers' view of pedestrians crossing Florence Avenue and endanger students. A drop off zone or driveway with signs can be made on Florence Ave.

#### 3.3 Proposed Drop Off Area on Florence Avenue



"no idling" signs can be made on Florence Avenue to prevent double parking.

#### 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 Florence Avenue 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 fully implement all the action steps.

Time Frame Definition	Cost Definition
<b>Short-term</b> = less than 3 months	<b>Low</b> = Less than \$2,000
Mid-term = between 3 to 6 months	<b>Medium</b> = between \$2,000 and \$10,000
Long-term = 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, Bike Skill events annually	School, EZ Ride	Short-term, Mid- term, Long-term	No cost
Remind parents where and when to pick up and drop off students via Robo Call twice a year annually – prioritize walkers and bicyclists to depart before those being picked up by cars	School	Short-term, Mid- term, Long-term	Low
Create or update Parent Handbook with arrival & dismissal procedures, map that defines drop-off/pick-up area, rules and speed limit for driving/parking in school zone, where to park bicycles, student walker entrances and crossing guards – include and encourage walking and bicycling to reduce traffic outside school.	School	Long-term	Low
Consider conducting "Drive Slow & Safe" Campaigns on Florence Ave and Springfield Ave. Notify parents/guardians and staff by publishing info in Parent Handbook, School news and website	School, Twp., County Police	Short-term, Mid- term, Long-term	Low
Ask Police to give a talk at Back to School Night or PTO meetings to educate parents about driving safely near school,	Police, School, PTO	Short-term, Mid- term, Long-term	No cost
and to promote walking and bicycling to school as well as the environmental and exercise benefits for students.			
---	-------------------	------------------	---------
Integrate walking and safety education	School,	Short-term, Mid-	No cost
(wear helmets, use crosswalks) into	PE/Health	term, Long-term	
classrooms	teachers		
Leverage Social Media to spread	School/District	Short-term, Mid-	Low
awareness of school zone and	Webmaster	term, Long-term	
enforcement activities	PTO, City, Police		
Perform a crossing guard training for	NJ SRTS	Short-term, Mid-	Low
guards annually	Resource	term, Long-term	
	Center, Police		

### 2. Encouragement: Programs to encourage or promote walking and biking

Encouragement Actions	Responsibility	Time Frame	Cost
Hold a student poster contest on Safe	School, EZ Ride	Short-term	No cost
Walking and Biking to school			
Circulate School Travel Plan Report via	School, PTO, City	Short-term	No cost
School and City website and PTO meetings			
Hold annual Bike/Walk to School or	School Health	Short-term, Mid-	No cost
Work Days during Car Free week	Council, PTO, EZ	term, Long-term	
(Sept.) International Walk to School	Ride, City		
month (Oct.), and NJ Bike and Walk to			
School month (May)			
Utilize the school website to advance	School Tech	Mid-term, Long-	No cost
Safe Routes to School safety messages	Coordinator,	term	
	District Safety		
	Officer		

**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, Police	Short-term, Mid-	No cost
School night		term, Long-term	
Investigate training parent volunteers to	School Liaison,	Mid-term, Long-	Low
start Walking School Buses to have	PTO, Police, Twp.	term	
parents help watch out for kids' safety			
Investigate what police and city can do	Police, City	Short-term, Mid-	Low –
to reduce prevalence of drug or criminal		term, Long-term	High
activity near school			
Ask County to conduct speed and traffic	County Sheriff	Short-term, Long-	Medium
study on Springfield Avenue		term	
Ask police to set up radar signs that	Twp. and County	Short-term, Long-	Low
post driver speeds and remind people	police, School	term	

to not speed in school zone	Safety Liaison		
Conduct Street Smart campaign near school	Police, NJTPA, EZ Ride	Short-term, Mid- term, Long-term	Low
Ensure sidewalks are shoveled and cleared of snow/leaves on school days so kids are not forced to walk in the streets	Twp. DPW and School can remind parents, residents to shovel and bag leaves	Winter	Low
Retrain all crossing guards to use stop paddles and proper crossing technique, add another crossing guard in front of school at intersection as one guard is not adequate to manage heavy traffic afterschool	Twp. Traffic Police, Crossing guards	Short-Term, Long- term	Medium
Ensure property owners are following local ordinances regarding trimming trees, shrubs so they don't block sidewalks, shoveling snow on sidewalks and garbage removal	Police, Twp., Volunteers	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 near school entrance	School	Short or Mid-term,	Low
Post "School Zone" signs and paint	Twp, County,	Short-term Mid-	Low
"SLOW SCHOOL ZONE or 25 MPH" on roadways surrounding school	NJDOT, DPW	term, Long-term	
Paint High Visibility Crosswalks at: Elmwood Ave & Elmwood Terrace, Wilson PI & Bross PI, Durand PI & Bross PI, Elmwood Ave & Elmwood Terrace, 40 <sup>th</sup> and Springfield Avenue, 40 <sup>th</sup> and Wagner, 40 <sup>th</sup> and Prospect, 40 <sup>th</sup> and Chancellor, Tiffany PI & Franklin Terrace, Elmwood Ave and Headley Terrace, Headley Terrace and Springfield Ave, Elmwood and Florence Avenue, Elmwood Avenue and Laurel, Elmwood Ave and Sanford Ave, Laurel and Sanford	County and Twp. DPW, Engineering, Police	Short-term, Mid- term, Long-term	Medium – High
Install, replace, or realign truncated domes at: Tiffany Place and Florence Avenue, Tiffany Place and Elmwood Terrace, 40 <sup>th</sup> and Wagner Pl,	County and Twp. Engineering, DPW, Police	Mid-term, Long- term	Medium – High

Prospect and Stuyvesant Avenue,			
Install Stop Sign at Wagner Place and 40 <sup>th</sup> Street	Twp. Engineering, DPW	Short Term	Low
Add a fence in front of school along Springfield Avenue and Florence Avenue to keep kids from running into the road or school driveway	School	Mid-term,	Low
Make a drop off area for young kids only on Florence Avenue with no parking/no idling signage and curb paint for parents, or make a circular driveway area for drive in and drop off	School	Short-term, Long term	Low – High
Work on garbage cleanup at: Headley Terrace and Elmwood Avenue, Tiffany Place, Bross Place. Provide garbage receptacles	County Engineering, Twp. Engineering, DPW	Short-term, Mid- term, Long-term	Medium – High
Gauge residents' feeling/apprehension regarding installing sidewalks on their property; investigate installing sidewalks	Twp., School, Habitat for Humanity	Short-term, Mid- term	Low – High
Repair drainage problems around drains on Edwards Avenue that are causing flooding, obstructing sidewalk ramps and causing road deterioration	Тwp.	Short term, Mid- term	Medium- High
Widen or repair broken sidewalk along: Bross Place, Florence Avenue, 38 <sup>th</sup> Street, 40 <sup>th</sup> Street, Springfield Avenue, Chancellor Avenue, Prospect Avenue.	Twp. and County Engineering, DPW, Habitat for Humanity	Short-term, Mid- term	High
Investigate traffic speeds around the school and post 25 mph speed limit signs	County and Twp. Engineering, Police	Short-term, Mid- term, Long-term	Medium
Consider Leading Ped. Interval phase at Florence Ave & Springfield Ave.	County and Twp. Engineering, Police	Short-term, Mid- term, Long-term	Low
Replace Stop signs with more visible flashing Stop signs	County & Twp. Engineering, DPW	Short-term, Mid- term, Long-term	Medium
Install more lights on commonly used student's walking routes and at corners. The lights should be directed at the sidewalk and not just to the roads. City or Health coalition can also provide LED bulbs to residents for porch lighting to prevent crime.	County & Twp. Engineering	Short-term, Mid- term	Medium
Investigate installation of "no turn on red" signs at the intersection of	County & Twp. Engineering, Police	Mid-term, Long- term	Medium

Stuyvesant Ave and Lyons Avenue as it has a very wide turning radius.			
Install additional speed bumps closer to Florence Avenue	County & Twp. Engineering, Police	Short-term, Mid- term, Long-term	Medium
Convert a portion of Lyons Ave to a pedestrian plaza that can also be used as a Kiss and Walk Drop-off point	County & Twp. Engineering, Police	Mid-term, Long- term	Medium
Install 'No Idling' sign and 'No Double' Parking Sign at Florence Avenue and Springfield Avenue in front of school	Twp, and County Engineering, DPW	Short Term	Low
Add Bike Racks in front of school, add pedestrian lighting to increase safety in front of the school. Add benches where parents can wait for children and planters for aesthetics.	School	Mid-term,	Low
Move the bus stop which is currently right in front of school one block east or west.	NJ TRANSIT	Mid-term,	Medium – High

### 5. Evaluation: Efforts to monitor progress towards the achievement of SRTS goals

Evaluation Actions	Responsibility	Time Frame	Cost
Conduct student travel tallies to measure if the number of students	School, EZ Ride,	Every few years	No cost
walking, biking or carpooling has			
increased			
Conduct speed studies to evaluate if	Twp. and County	Short-term, Mid	Low
traffic complying with speed limit	police	Term	
Update Complete Streets Policy to	Twp.	Mid-term, Long-	Medium
ordinance and assess Implementation		term	to High
Improve communications between	School, PTO, Parent	Short-term, Mid-	Low
school officials and families	liaison, Webmasters,	term, Long-term	
establishing a convenient mechanism	District leaders and		
to share information and get feedback	newsletter		

### Conclusion

The measures that are recommended in this travel plan will improve walkability, increase pedestrian and student safety, encourage students and parents to walk or bike to school, and improve opportunities for better long-term health outcomes. Through increased use of active transportation (walking and biking), residents can also make Irvington a more appealing community by reducing air pollution and traffic congestion.

It is recommended that Florence Avenue Elementary School, Irvington Twp. and Essex County improve safety for students and residents who walk and bike in the neighborhood. Crossing guards can be retrained to use safe crossing techniques and it's recommended to add a second guard at the intersection of Florence Ave. & Springfield Ave. We have proposed a drop off point/pedestrian plaza at Lyons Avenue for parents to drop off older kids a short distance from school to reduce congestion and encourage kids to walk. We also suggest a drop off area for young children on Florence Avenue. There are locations on all three routes we assessed that lack good lighting, safe sidewalks, visible crosswalks, and curb ramps. Installing these will increase the safety of and improve accessibility for students, residents, seniors, parents with strollers and those in wheelchairs. Many sidewalks are uneven or broken surrounding the school. These are tripping hazards and make mobility challenging for the disabled or those using strollers. Some sidewalks also have a lot of trash which creates an unpleasant and unhealthy environment. Reducing the speed of traffic near the school, encouraging students to walk and bike for their health, and adding pedestrian lighting, high visibility striped crosswalks, SLOW SCHOOL ZONE or 25 MPH pavement markings/signs, speed limit signs, and flashing SLOW or STOP signs will all be beneficial. Steps should be taken to repair/add ADA compliant curb ramps to improve accessibility for those with special needs. Repairing damaged roadways and repainting faded stop bars is very important. Striping high visibility crosswalks will help to alert traffic where students cross and should be done as soon as possible as many of the intersections we assessed had no crosswalks or very faded crosswalks. According to the residents, there are streets that harbor drug or other criminal activity and steps should be taken by the police to prevent/discourage that type of activity near all walking routes and to protect students and residents in the area. Improved pedestrian street lighting, neighborhood porch lights, and a strong police presence are advised.

The school community's desire to collaborate to protect students and encourage safe walking and bicycling is admirable and deserves support from the State and City. EZ Ride is proud to work with the community to improve safety, do safety education in the schools and provide incentives/helmets and bike skill courses to encourage students to walk and bike. It is hoped that recommendations from this School Travel Plan report will be implemented and that the Travel Plan will be used to apply for an SRTS, TAP or Bikeways infrastructure grant to improve the the active travel environment. Ultimately, the goal is to make the intersections, sidewalks, and streets safer for students to walk and bike to school.

### Table 5

### **Typical Opportunities for Improvements**



### **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**



### **Typical Bicycle/Pedestrian Treatments**



### **Typical Traffic Calming Devices**



- 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 wellmaintained



### 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

### Appendix **B**

### Table 6: Funding & Building Resources to Build Infrastructure

Source: Together North Jersey (TNJ) Funding and Resources Database <u>https://togethernorthjersey.com/?page\_id=24974#home/</u>

Program Name	Program Description	Eligibility	Eligibility	Source
21ct Contury	To provide municipalities and	Description	County	Now Jorcov
21st Century	To provide municipalities and	New Jersey	County, Municipal	New Jersey Economic
Redevelopment	counties with the funding necessary to redevelop "stranded	municipal or county governments, and	wunicipal	Development
Program	assets," which are underutilized	redevelopment		Authority
	or vacant office or retail spaces,	agencies		Authonity
	usually located far from transit	agencies		
Biking in New	NJDOT offers engineering	New Jersey	Municipal	New Jersey
-	guidelines, a Master Plan for	communities	wuncipar	Department of
Jersey - Planning	roadways that are compatible	communities		Transportation
Resources	with bicyclists and walkers and a			
Resources	resource center for statewide			
	projects			
Community	The Community Development	Larger cities and	County,	US Housing
Development	Block Grant (CDBG) program is a	urban counties	Municipal	and Urban
Block Grants	flexible program that provides	urban counties	wuncipar	Development
DIUCK GLAIIUS	communities with resources to			Development
	address a wide range of unique			
Congestion	community development needs To advance readily	Local, County, State,	County,	NJTPA
Mitigation and	implementable and innovative	and Regional	Municipal,	NJIPA
Air Quality	projects and services that	governments	State	
Initiatives	improve air quality and reduce	8		
	congestion in the NJTPA's air			
Program	quality maintenance and non-			
	attainment areas			
Environmental	Eligible entities, including	Non-profit	County,	US EPA
Workforce	nonprofit organizations, to deliver	organizations and	Municipal,	Environmental
Development	environmental workforce	local government	Non-profit	Workforce
and Job Training	development and job training	agencies in	organizations	Development
Grants	programs that recruit, train, and	communities	organizations	and Job
	place local, unemployed and	historically affected		Training Grant
	under-employed residents with	by economic		Fund
	the skills needed to secure full-	disinvestment,		i unu
	time employment in the	health disparities,		
		nearth uispanties,		

	environmental field	and environmental		
		contamination,		
		including low-		
		-		
		income, minority,		
		and tribal		
		communities		
Future in	NJFIT changed the way NJDOT does	New Jersey	Municipal	New Jersey
Transportation	business in New Jersey by using a	Communities.		Department of
	comprehensive and cooperative			Transportation
	approach to transportation and land			
	use planning. Working with			
	community planners, we can keep			
	jobs, goods and services within reach			
	of every New Jersey citizen and			
	reinvest in our infrastructure by			
	shaping transportation to fit into the			
	environment of our communities			
Geraldine R.	Funds Arts, Education, Environment	no restrictions	State, County,	Geraldine R.
Dodge	and Informed Communities		Municipal,	Dodge
Foundation	initiatives that are innovative and		Private, Non-	Foundation
	promote collaboration and		profit	
	community-driven decision making		organizations,	
			Other	
Local Planning	Local Planning Services (LPS), an	Municipalities	Municipal	New Jersey
Services	office within DCA, works with	·		Department of
	communities to achieve local land			Community
	use and planning goals. As part of			Affairs
	DCA's commitment to provide			Analis
	technical assistance to			
	municipalities, our professional			
	planning staff offers comprehensive			
	planning services at no-cost to local			
	governments. LPS Can provide a			
	variety of planning services: master			
	plans and redevelopment plans, land			
	us land mapping, economic			
	development plans, and special			
	municipal projects			
Neighborhood	This program provides direct	Municipalities	Municipal	New Jersey
Preservation	financial and technical assistance			Department of
Program	to municipalities over a three to			Community
-	five year period to conduct			Affairs
	activities associated with the			
	preservation of designated			
	Preservation of actignated		l	1

	neighborhoods based on strategic			
	revitalization's plans within those			
	municipalities.			
New Jersey	The aim of the initiative is to		Non-profit	New Jersey
Healthy	prevent chronic disease and		organizations,	Healthy
Communities	improve health by advancing		Other	Communities
Network -	environment, policy, and system			Network
Community	change; and enhancing the built			
Grants Program	environment to support healthy			
	eating and active living.			
	Supported projects are creating a			
	culture of health by increasing			
	food access and opportunities for			
	physical activity in communities,			
	schools, places of worship, early			
	care and education,			
	neighborhoods, and			
	municipalities.			
	The Network also facilitates a			
	statewide community of practice			
	to share best practices, provide			
	networking and professional			
	development opportunities, and			
	encourage collaboration. Within			
	this community of practice,			
	grantees will be connected to			
	people and organizations with			
	shared goals and agendas and be			
	recognized as a leader in building			
	healthy communities			
Our Town	The Our Town grant program	Communities	Municipal	National
Grants	supports creative place making			Endowment for
	projects that help to transform			the Arts
	communities into lively, beautiful,			
	and resilient places with the arts			
	at their core.			
People for Bikes	The People For Bikes Community	Communities across	Municipal	People for Bikes
Community	Grant Program provides funding for	the US		- Community
Grants	important and influential projects			Grants
	that leverage federal funding and			
	build momentum for bicycling in			
	communities across the U.S. These			
	projects include bike paths and rail			
	trails, as well as mountain bike trails,			
	bike parks, BMX facilities, and large-			

	scale bicycle advocacy initiatives			
Safe Routes to	Provides federal and state	County, municipal	County,	New Jersey
Schools	funding to projects that enable	governments,	Municipal	Department of
	children in grades K-8 to walk and	school districts, and		Transportation
	bicycle more safely to school.	schools		
Safe Routes to	Safe Routes to School (SRTS) is a	Communities in	County,	New Jersey
Schools	federal, state and local effort to	New Jersey	Municipal	Department of
	enable and encourage children,			Transportation
	including those with disabilities,			
	to walk and bicycle to school.			
	SRTS facilitates the planning,			
	development and			
	implementation of projects that			
	improve safety and air quality, as			
	well as reduce traffic and fuel			
	consumption around school			
Safe Routes to	The Safe Routes to Transit program	Counties and	County,	New Jersey
Transit	was established in 2006 with state	municipalities.	Municipal	Department of
	funding to enable counties and			Transportation
	municipalities to improve safety in			
	the vicinity of transit facilities and to make routes to bus stops and rail			
	stations safer for bicyclists and			
	pedestrians			
Street Smart	Communities that participate in the	Municipalities and	Municipal	North Jersey
Program	Street Smart Program work to raise	communities in		Transportation
U	awareness of pedestrian safety laws	New Jersey		Planning Agency
	by hosting events, handing out	,		
	information, and through social			
	media. Local police step up			
	enforcement during the campaign to			
	ensure motorists and pedestrians are obeying the laws. All communities			
	are urged to participate			
Sustainable	Sustainable Jersey identifies	New Jersey	Municipal	
Jersey Grants	resources to help municipalities	municipalities		Sustainable New
and Resources	develop a comprehensive	(* * * * * * *		Jersey
	sustainable community program.			
	This includes financial resources in			
	the form of grants and incentives,			
	and technical support in the form of			
	trainings, access to support			
	organizations, and guidance material			