

Safe Routes to School Program

Dewitt D. Barlow Elementary School

2 Farragut Road, Plainfield NJ 07062



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April 4, 2018



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 requires applicants to have an approved School Travel Plan in order to apply for a grant.

1. Goals

The goals of the Dewitt D. Barlow Elementary School Travel Plan are:

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

2. Task Force

This School Travel Plan is the product of a robust and productive partnership. The Dewitt D. Barlow Elementary School SRTS Task Force came together out of a shared community interest in improving the lives of students and residents. The involvement of local stakeholders is an important part of ensuring the sustainability of the SRTS initiative and the enactment of the Action Plan.

3. Community Barriers to Health

According to the Community Health Needs Assessment Survey conducted in 2016 by the North Jersey Health Collaborative, many residents in Union County do not meet federal standards for healthy eating and physical activity. Top concerns identified in the report include:

- a. Obesity: 24.5% of adults in Union County are obese and the rate of low-income preschool obesity (19.3%) is among the worst in the nation. Obesity is a precursor of chronic disease such as diabetes, cardiac disease, high cholesterol and high blood pressure
- b. Diabetes Mortality Rate: In Union County, the age-adjusted death rate due to diabetes is 24.7 per 100,000.
- c. Heart Disease: 29.4% of the population (and 59.6% of Medicare beneficiaries) have hypertension (high blood pressure)

4. School Travel Data

In November 2017, Dewitt D. Barlow Elementary School teachers conducted a School Travel Tally to determine how students travel to and from school. Typically 40 percent of students walk to school, 33 percent of students are driven to school, 6 percent use the school bus, 21 percent carpool, and 0 percent use public transit or ride bicycles to school. At dismissal, 44 percent of students walk home, 25 percent of students are driven home, 8 percent use the school bus, 23 percent carpool, and 0 percent use public transit or ride their bicycles home.

5. Barriers and Opportunities Identified for Safer Walking & Biking

The Safe Routes to School Taskforce and Community Partners conducted a detailed walkability assessment of the road conditions along the main routes used by the students to walk to school on October 18, 2017. The major roads and intersections surrounding the school include:

- a. Farragut Rd. and East Front St.
- b. East Front St. and Berckman St.
- c. East Front St. and Norwood Ave.

Key opportunities for street improvement around Dewitt D. Barlow Elementary School include: painting new high visibility crosswalk striping, repainting faded crosswalks and faded stop bars, adding or realigning truncated dome pads/curb ramps to meet Americans with Disabilities Act (ADA) standards, and holding campaigns to slow drivers on East Front Street (County Road 620).

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 items 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 pedestrian and bicycle improvements.

Key Actions/Recommendations in Action Plan include:

- Paint/repaint high visibility crosswalks along Farragut Rd. & East Front St.
- Install/Realign curb ramps and truncated domes at Farragut Rd. & East Front St., East Front St. & Garfield Ave., East Front St. & Netherwood Ave.
- Repair / Repave sidewalks on Farragut Rd., East Front St., and Berckman St.
- Install traffic calming measures to reduce speeding such as narrowing lanes, adding bike lanes, installing speed tables, speed humps, rumble strips or, flashing SLOW or flashing STOP signs to alert drivers to the school zone.
- Conduct speed studies to analyze if traffic calming measures have reduced speeds
- Hold a “Drive Slow and Safe on East Front Street” campaign to slow traffic and alert drivers to “protect students and prevent crashes”
- Assist pedestrians by installing pedestrian countdown signal heads at Farragut Rd. & East Front St.

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 contributed to 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).

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.¹

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. It also explores the factors that influence walking and biking to school, including the impact of SRTS programs.

In the 2013 book, Designing Healthy Communities, 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 include community members, elected officials, city planners, and police departments. SRTS brings a community

¹ Walking and Biking to School, Physical Activities and Health Outcomes, Robert Wood Johnson Foundation

closer together by implementing programs such as walking school buses, walkability audits, bicycle rodeos and pedestrian safety presentations. The benefits of SRTS extend far beyond the schools into the community as a whole.

A SRTS 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 identifies the following:

- Where do students currently walk and bike?
- Where would students 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

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.

EZ Ride and SRTS

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, and to encourage biking and walking that can help to 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.

The Safe Routes to School program has been very active in the Plainfield School District and City of Plainfield for the past three years. We first began our partnership with in the City in 2015 with a bike rodeo at the Plainfield Boys and Girls Club. A bike rodeo teaches participants the skills needed to ride their bike safely such as scanning, hand signals, and how to properly start and stop.

In April of 2016, we coordinated 9 pedestrian and bike safety presentations to 613 students at Woodland Elementary, Jefferson Elementary, and Evergreen Elementary. At safety presentations, students learn to use crosswalks, to stop and look both ways before crossing, to

understand signals, and how to dress to be seen & safe. In June and July, we organized two bike rodeos through the city of Plainfield for 78 participants. In September of 2016 we conducted 6 presentations to 260 students at Evergreen Elementary and Hubbard Middle School. In January of 2017, we did 4 safety presentations to 285 students at Woodland Elementary, Jefferson Elementary, and Evergreen Elementary. We also partnered with the City, School District and Plainfield Dairy Queen during the Spring and Summer of 2017 to host four bike rodeos with 149 participants.

In September of 2017, EZ Ride conducted two pedestrian safety presentations at Dewitt D. Barlow Elementary school for 420 students. We returned on October 18, 2017 to facilitate a Walk to School Day to reinforce the safety rules the students learned during the presentation in September. We concluded 2017 with a Walk to School Day and Safety presentation at Queen City Academy Charter School for 216 students. On February 23, 2018, EZ Ride also spoke at the Senior Center to a group of 25 seniors about walking safety.

EZ Ride has also been working on promoting healthy food access in the city in four corner stores. Eating healthier foods is mentioned for students in our safety presentations as another means to health and wellness.

To recognize the School District and City's effort to improve pedestrian safety, Dewitt D. Barlow will be receiving the Gold Safe Routes to School Recognition Award and the City of Plainfield will be receiving the Silver Safe Routes to School award in 2018.

The City of Plainfield

The City of Plainfield's Department of Health, Parks and Recreations, and Economic Development have been instrumental in providing support, staff, and technical assistance to aid EZ Ride and Dewitt D. Barlow Elementary School in creating a safer walking and biking environment in Plainfield.

Plainfield School District

The Safe Routes to School program has garnered the support of Plainfield's Board of Education and Acting Superintendent Dr. Caryn Cooper. Dr. Caryn Cooper has shown support for EZ Ride and Barlow Elementary by helping to escort students to school during Walk to School Day.

Background to Walkability Assessment

As part of EZ Ride's Healthy Community Network efforts, the SRTS team agreed to do a walk audit each year for the community to assess walkability and safety for student and resident pedestrians and cyclists. The team decided on Dewitt D. Barlow Elementary School after Principal Mr. Wilson Aponte expressed concern for the safety of his students that walk to and from school.

EZ Ride made a presentation to Barlow Elementary's fifth grade students as well as city and school administrators on October 18th entitled "How to Conduct a Walk Audit". Members of

the group then conducted a SRTS walk audit to assess the neighborhood walking routes that students use.

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 on the next page.

Dewitt D. Barlow Elementary School Travel Plan Task Force

Organization	Role/Responsibility	Contact
Dewitt D. Barlow Elementary School	Program Activity and Implementation	Wilson Aponte Principal 2 Farragut Road Plainfield , NJ, 07062 908-731-4292 WAponte@plainfield.k12.nj.us
Dewitt D. Barlow Elementary School	Program Activity and Implementation	Dianna Repollet Principal's Secretary 2 Farragut Road Plainfield , NJ, 07062 908-731-4292 drepollet@plainfield.k12.nj.us
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Alan M. Voorhees Transportation Center Edward J. Bloustein School of Planning and Public Policy, Rutgers The State University of New Jersey	SRTS Assistance, Travel Tally Reports	Sean Meehan, Project Manager Alan M. Voorhees Transportation Center Bloustein School of Planning & Public Policy Rutgers, The State University of NJ 33 Livingston Avenue New Brunswick, New Jersey 08901 848-932-2860 smeehan@ejb.rutgers.edu

<p>Alan M. Voorhees Transportation Center/SRTS Resource Center</p> <p>Edward J. Bloustein School of Planning and Public Policy, Rutgers The State University of New Jersey</p>	<p>Web- based resources, Technical Assistance, SRTS Recognition Program, Helpdesk assistance, SRTS Tools, Tips and Training</p>	<p>Trish Sanchez Public Outreach Specialist Alan M. Voorhees Transportation Center Bloustein School-Planning & Public Policy 33 Livingston Avenue New Brunswick, New Jersey 08901 (848)-932-2376 trish.sanchez@ejb.rutgers.edu</p>
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2. District & School Profile

A school profile for Dewitt Barlow Elementary School was developed using data from the Plainfield Public Schools District website, the Dewitt Barlow Elementary School website, the New Jersey School Performance Report, and the National Center for Education Statistics.

Plainfield Public Schools serve approximately 7,600 students from Kindergarten – Grade 12 from 2014-2015. The district has 12 schools (Preschool – Grade 8), and three high schools (Grades 7 – 12). Student demographics are shown in Table 1 below.

Table 1: Plainfield Public Schools– Student Demographics

Ethnicity		# of Students
African-American		4,477
Hispanic		4,822
Caucasian		47
Asian/Pacific Islander		34
American Indian/Native American		7
Two or More Races		21
Gender		# of Students
Male		3,906
Female		3,692
Grade Level		# of Students
Primary (Pre-Kindergarten – Grade 4)		3,549
Middle School (Grade 5 - 8)		1,837
High School (Grade 9 - 12)		1,796
Special Needs Students/Individualized Education Program		416

Academic Performance

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. The Plainfield Public School district is classified by the NJ Department of Education as District Factor Group “B,” the second lowest of eight groupings, indicating a disadvantaged community.

2.1 Plainfield and Union County Health Profile –Community Health Needs Assessment

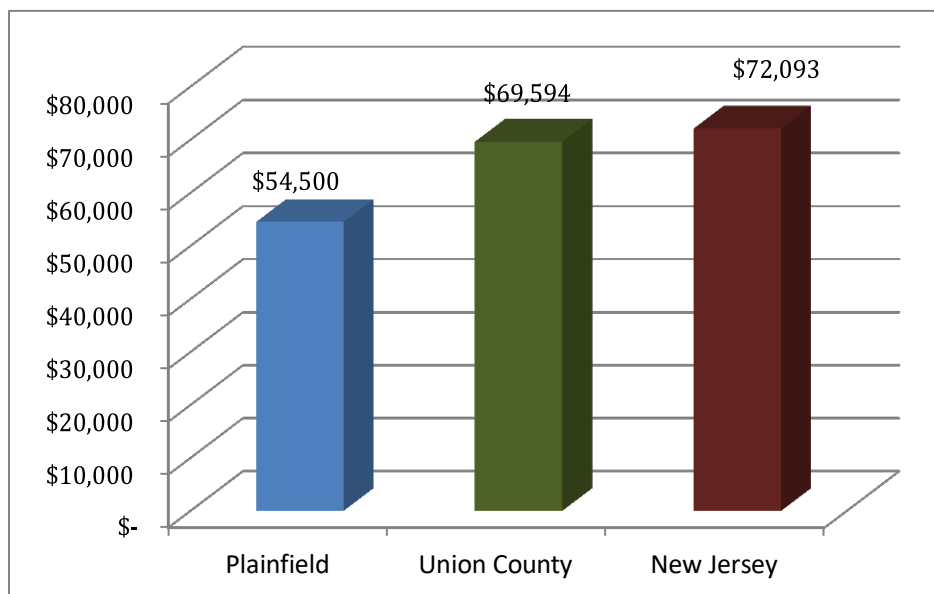
In 2016, the North Jersey Health Collaborative worked with the Center of Population Sciences and the Atlantic Health System to conduct a Community Health Assessment of Union County. The North Jersey Health Collaborative is a 501(c)3 organization with over 120 partner organizations aligned around shared goals for collective impact. In 2015, the Collaborative conducted a year-long process of community-based assessment entitled “Painting a Picture of Community Health”. Throughout this process, 107 community leaders participated from 56 organizations representing 12 community sectors. After data was collected, three data review sessions were held in Union County and a total of 125 issues were identified. Key issues include:

1. Diabetes
2. Access to Mental Health Services
3. Health Literacy
4. Obesity
5. Heart Disease

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. Source: Centers for Disease Control and Prevention

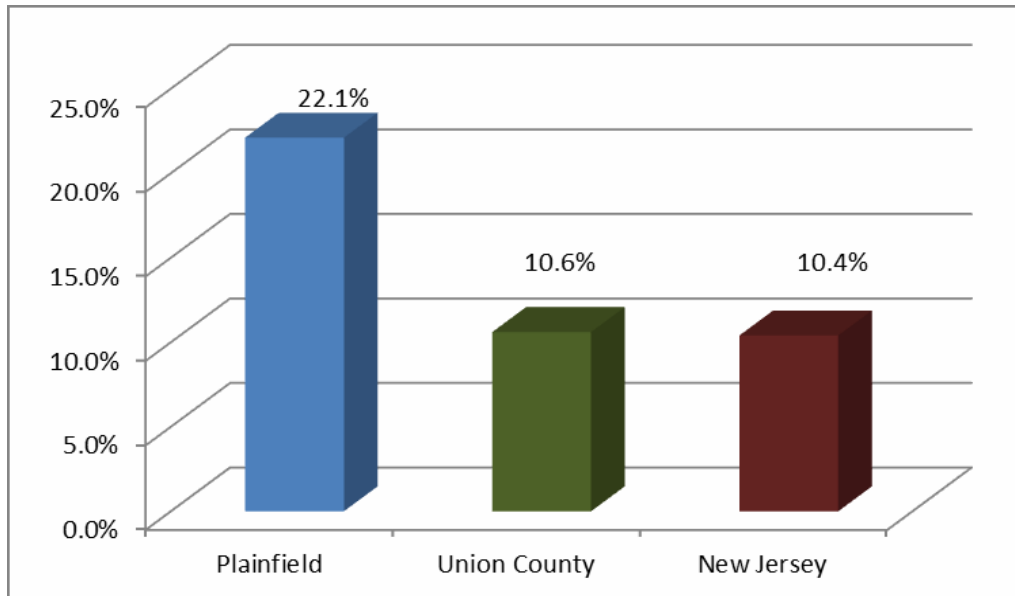
Chart 1: Median Household Income



American Community Survey 5-year Estimate, 2015

Union County's economic wealth is not distributed evenly across all residents, as there are large urban areas that include a considerable number of poor and minority populations. Plainfield's median household income is approximately \$15, 094 less than the median household income in Union County and \$17,593 less than the median household income for New Jersey.

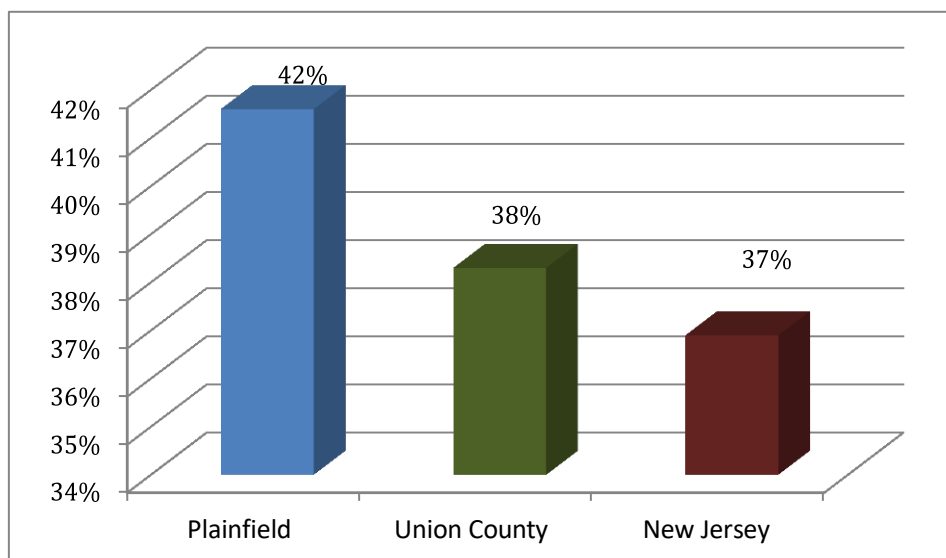
Chart 2: Persons in Poverty



Census.gov, 2016

In 2016, 22.1% of Plainfield residents lived in poverty. This is more than double the poverty rate in Union County and New Jersey.

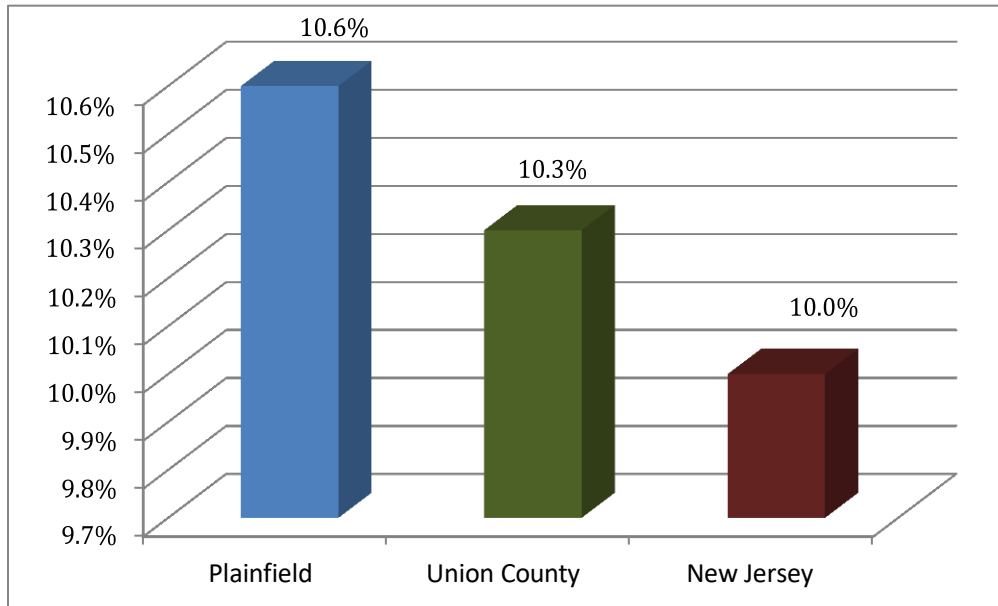
Chart 3: Adult Obesity



Citydata.com, 2000-2016

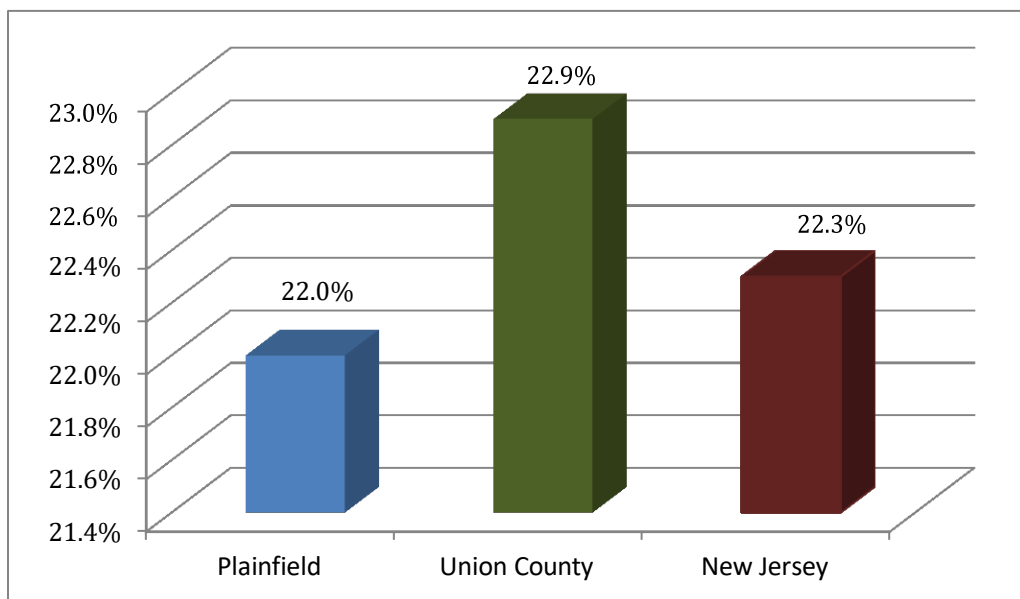
The obesity and diabetes rates in Plainfield as shown in Charts 3 and 4 are higher than the rates in Union County and NJ. Walking and biking and increasing physical activity can help to lower the rates of obesity and diabetes.

Chart 4: Adult Diabetes



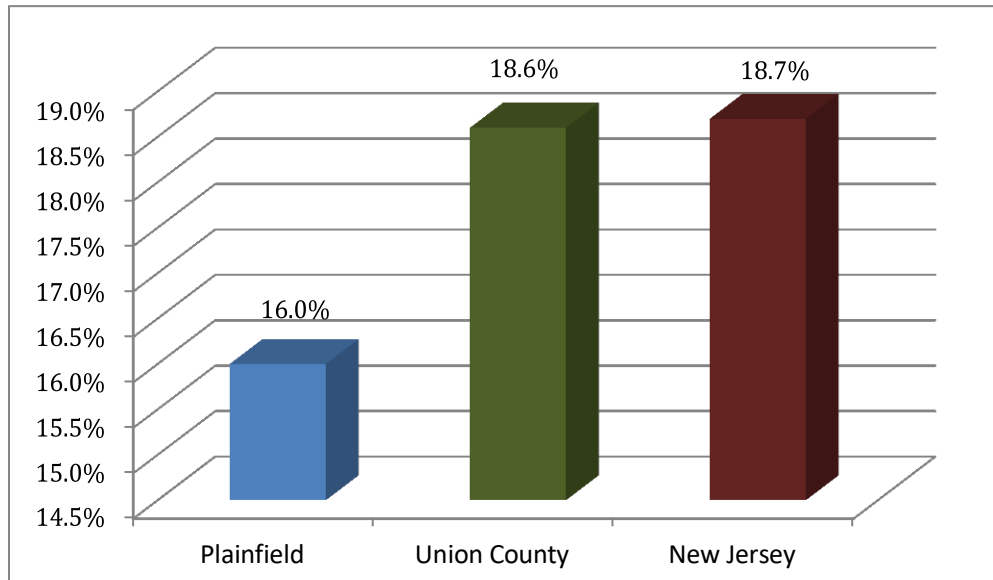
Citydata.com, 2000-2016

Chart 5: Percent of People Told by a Health Professional They Have Hypertension or High Blood Pressure



Citydata.com, 2000-2016

**Chart 6: Percent of People Told by Health Professional
Their Blood Cholesterol is High**



Citydata.com, 2000-2016

In regards to Charts 3-6, 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. Promoting walking and biking can potentially help residents and students with long term health outcomes.

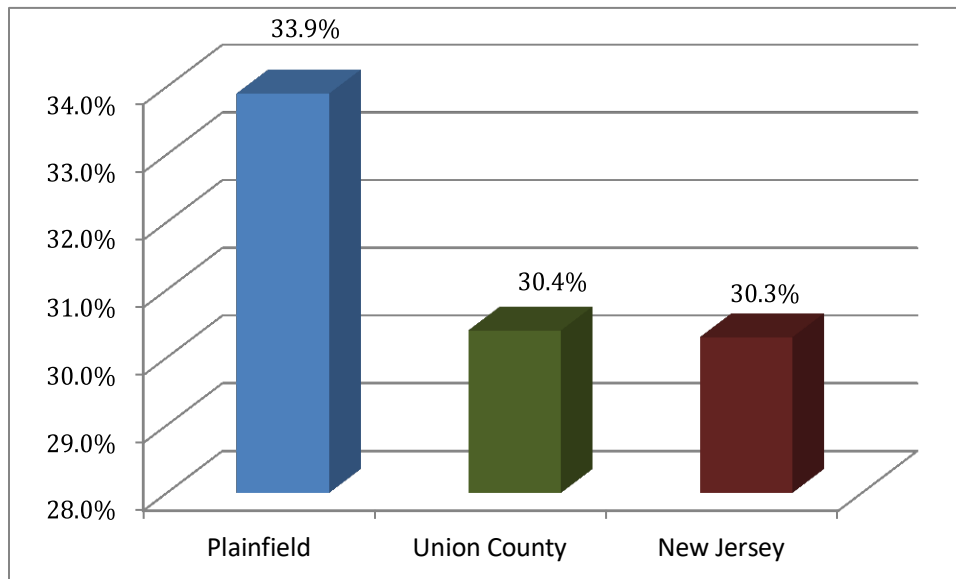
Media Viewing Habits

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.

Physical Activity

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.

Chart 7: Percent of People Walking or Biking



Citydata.com, 2000-2016

The percentage of people who walk or bike at least 10 minutes continuously to get to and from places was slightly higher in Plainfield than in Union County and New Jersey. However, with increased pedestrian/ bike education and infrastructure improvements, this percentage can increase

2.2 Dewitt D. Barlow Elementary School

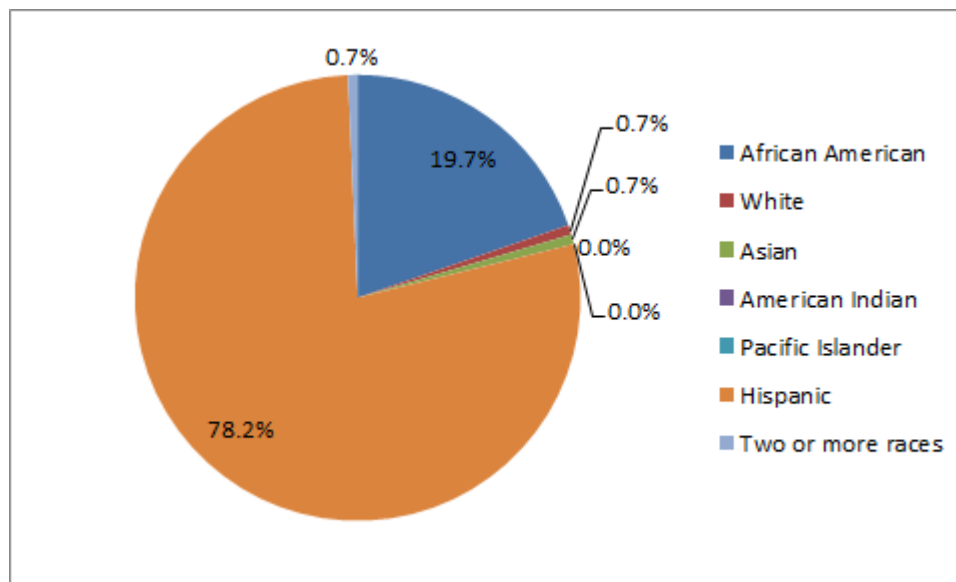
Excerpt edited from the New Jersey Academic Report school narrative:

The staff, parents and community of Barlow Elementary School are committed to achieving and maintaining high academic standards. Barlow Elementary School will maintain effective school leadership that fosters respect, trust and collaboration. Collectively we will provide a safe and supportive learning environment that fosters curiosity, inquiry and a lifelong passion for learning. The academic goal is to move students to proficient and advanced proficient across all grade levels.

DeWitt D. Barlow School is devoted to a structured school day that demonstrates rigorous data driven instruction and positive student growth and development. By maintaining this focus and partnerships with parents and community we are moving our children to be successful and thriving members of their communities and the society in which they live.

Dewitt D. Barlow Elementary serves approximately 407 students in Kindergarten to Grade Five. As Chart 5 below shows, 78.2 percent are Hispanic, 19.7 percent of the students enrolled are African American, 0.7 percent identifies as Two or More Races, and 0.7 percent of students are White.

Chart 8: Dewitt D. Barlow Elementary Enrollment by Student Ethnicity in 2015 – 2016



New Jersey School Performance Report. 2015 – 2016

<https://rc.doe.state.nj.us/report.aspx?County=13&District=3880&School=120&SchoolYear=2015-2016&SY=1516>

The number of students has changed slightly from 410 in 2015 to 407 in 2016. As shown in Table 2 below, Spanish is the dominant language spoken at home by a wide margin at 73.2 percent of the students.

Table 2. Student Language Diversity (2015 – 2016)

Language Diversity	
Percent of students who speak the following languages at home	
English	24.8%
Spanish	73.2%
Creoles and pidgins, French-based	0.5%
Vietnamese	0.5%
GA (Kwa language spoken in Ghana)	0.2%
Other	0.6%

<https://rc.doe.state.nj.us/report.aspx?County=39&District=4160&School=080&SchoolYear=2015-2016&SY=1516>

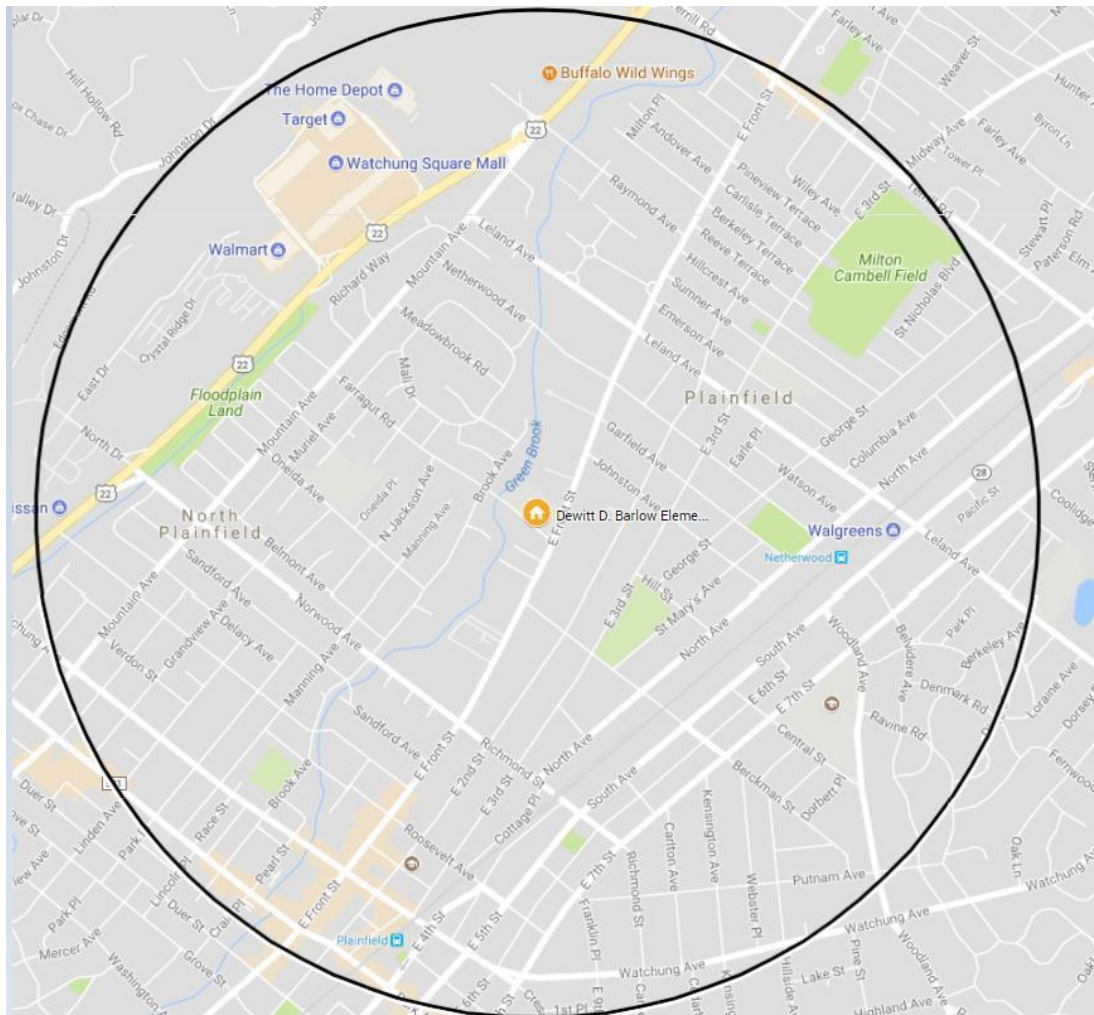
As Table 2 indicates, a majority of students (73.2%) speak Spanish at home followed by 24.8 % who speak English.

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 resulted in 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 and 2 provides a broad overview of the residential area near Dewitt D. Barlow Elementary School.

Map 1: One Mile Radius around Dewitt D. Barlow Elementary School

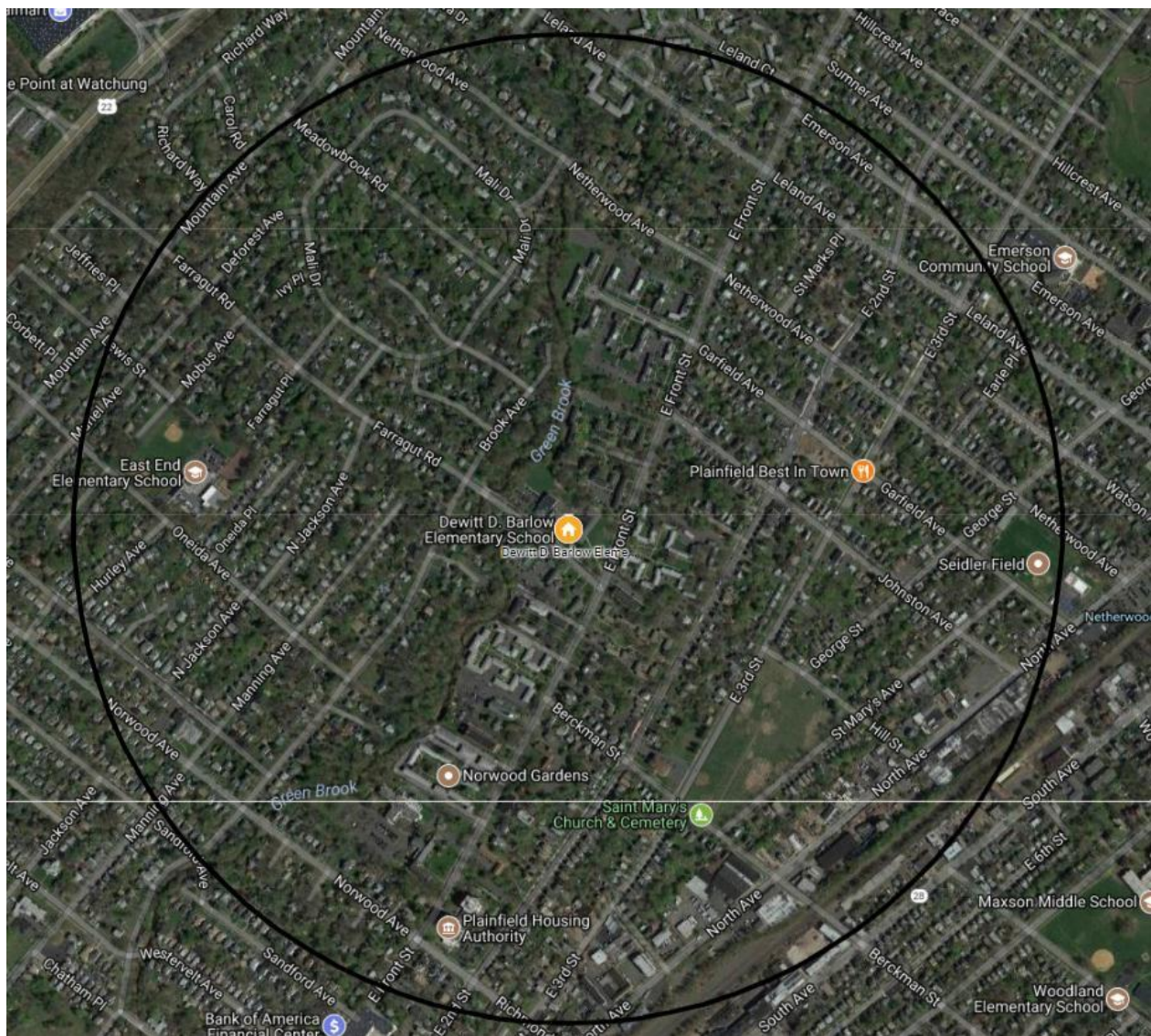
Map 1 shows a one-mile radius surrounding the school. The neighborhood is in close proximity to Milton Campbell Field and Seidler Field.



Google Maps, 2018



Map 2: One Half Mile Radius Satellite View around Dewitt D. Barlow Elementary School



Google Maps, 2018

3.1. Current Student Travel Environment

School Hours

The school day for Dewitt D. Barlow Elementary School students starts at 8:05 AM and ends 2:35 pm Monday through Friday. Barlow Elementary has a before school breakfast program which starts at 7:30 AM and an afterschool program which runs from 3:00 PM-5:00 PM.

Drop-off/Pickup Procedure

Parents and school busses drop off and pick up students on Farragut Rd. School busses are provided for students in the afterschool program and students with special needs. All students enter through the same front entrance door.

Crossing Guards

Crossing guards are stationed at the intersection of Farragut Rd. and East Front St. as well as at Second St. and Berckman St. in the morning from 7:45 – 8:15 am and in the afternoon from 2:30 – 3:00 pm. Based on traffic and congestion during arrival and departure it may be suggested to extend these hours.

Student Travel Mode

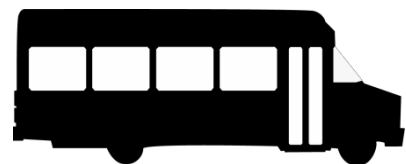
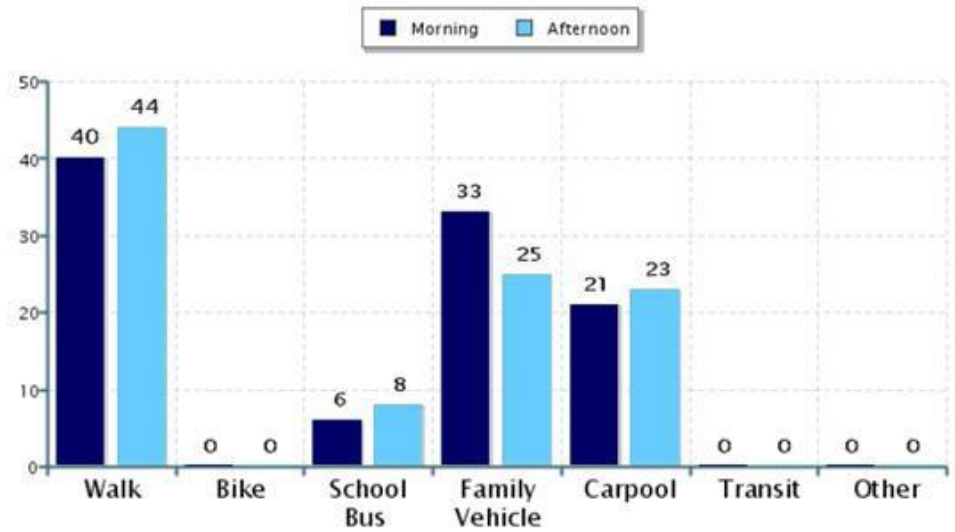
In November 2017, the teachers conducted a SRTS Student Travel Tally Survey to document how the children in their classes get to and from school. A total of 934 trips were documented and the data was analyzed by the NJ Safe Routes to School Resource Center at the Voorhees Transportation Center, Rutgers University.

As shown in Table 3, the analysis found that about 40 percent of children walk to school, 33 percent were driven to school, 6 percent rode the school bus, 21 percent carpooled to school, 0 percent used public transit, and 0 percent rode bikes to school. With regard to dismissal, the study showed that 44 percent of students walked home, 25 percent were driven home, 8 percent of students rode the school bus home, 23 percent carpooled home, 0 percent used public transit and 0 percent of students rode bikes home.

Table 3: Current Commute Mode

Mode	Arrival	Dismissal
Walk	40%	44%
Driven in personal car	33%	25%
School Bus	6%	8%
Carpool	21%	23%
Transit	0%	0%
Bike	0%	0%

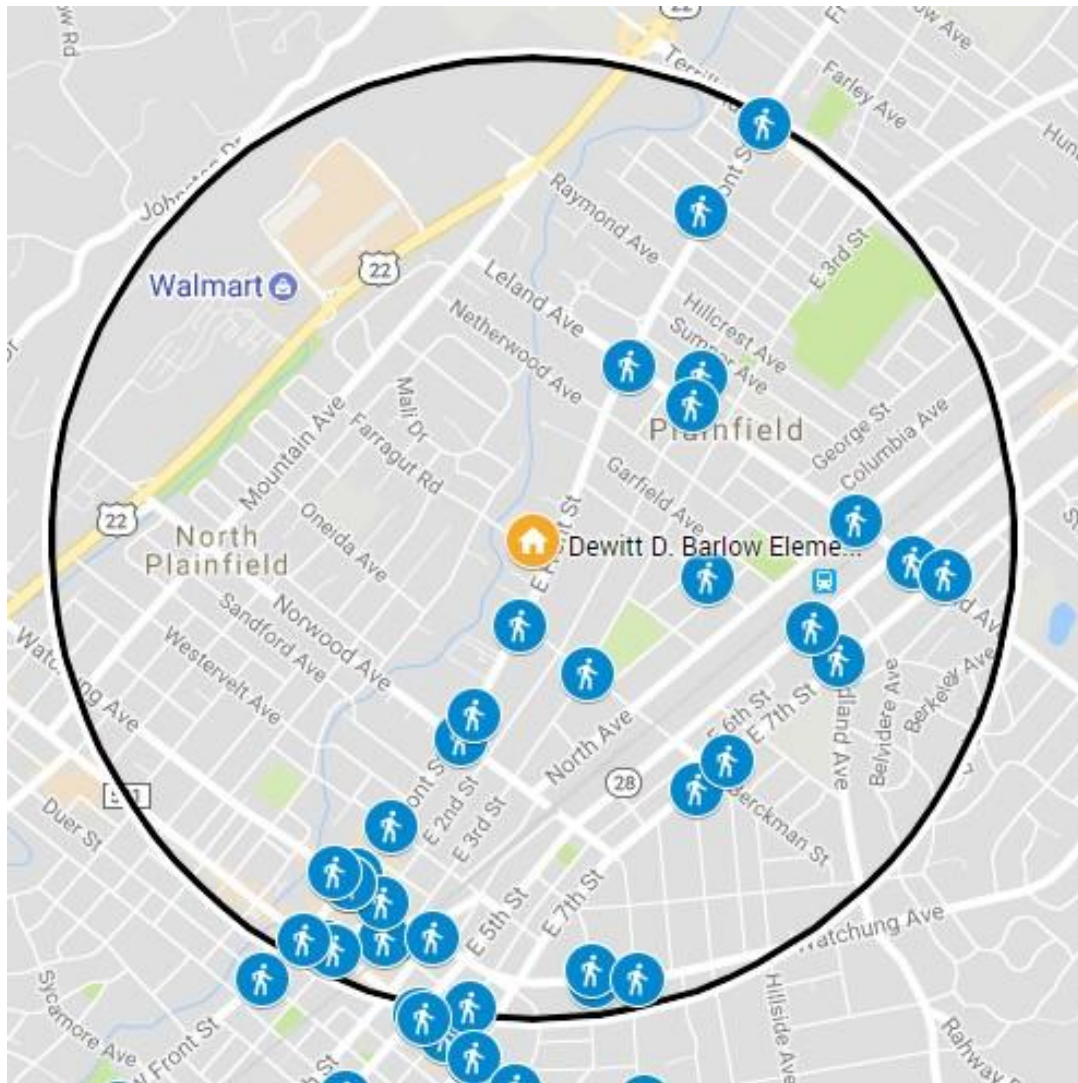
Chart 9: Morning and Afternoon Travel Mode Comparison



3.2 Pedestrian Safety

EZ Ride conducted an analysis of the pedestrian-related crashes within a one-mile radius of the school over a 5-year period from 2011 to 2016 based on police incident reports. The reported incidents were plotted on Map 3.

Map 3: Pedestrian Crashes within One Mile of Dewitt D. Barlow Elementary, 2011-16



Google Maps, Data from Numetric



=Locations where a pedestrian has been hit by a vehicle

Table 4: Pedestrian Crashes by Age, In City of Plainfield (2011-2016)

Age	2011	2012	2013	2014	2015	2016	Total	Percent
0-10	2	4	4	0	0	3	13	5%
10-17	6	6	6	6	1	1	26	11%
18-35	15	13	13	9	16	12	78	31%
36-60	12	21	17	9	19	6	84	33%
60+	6	5	12	5	9	17	54	21%
Total	41	49	52	29	45	39	255	

Source: Numetric, 2016, (percentages may not equal 100% due to rounding)

Using the program Numetric, pedestrian crashes by age were determined for the City of Plainfield. From 2011-2016 there were 255 pedestrian crashes. On average, the City of Plainfield had 43 pedestrian crashes per year. While the majority of the crashes (85 percent) involved pedestrians aged 18 - 60+, about 16 percent (39) of the total 255 incidents involved children in the 0-17 age group.

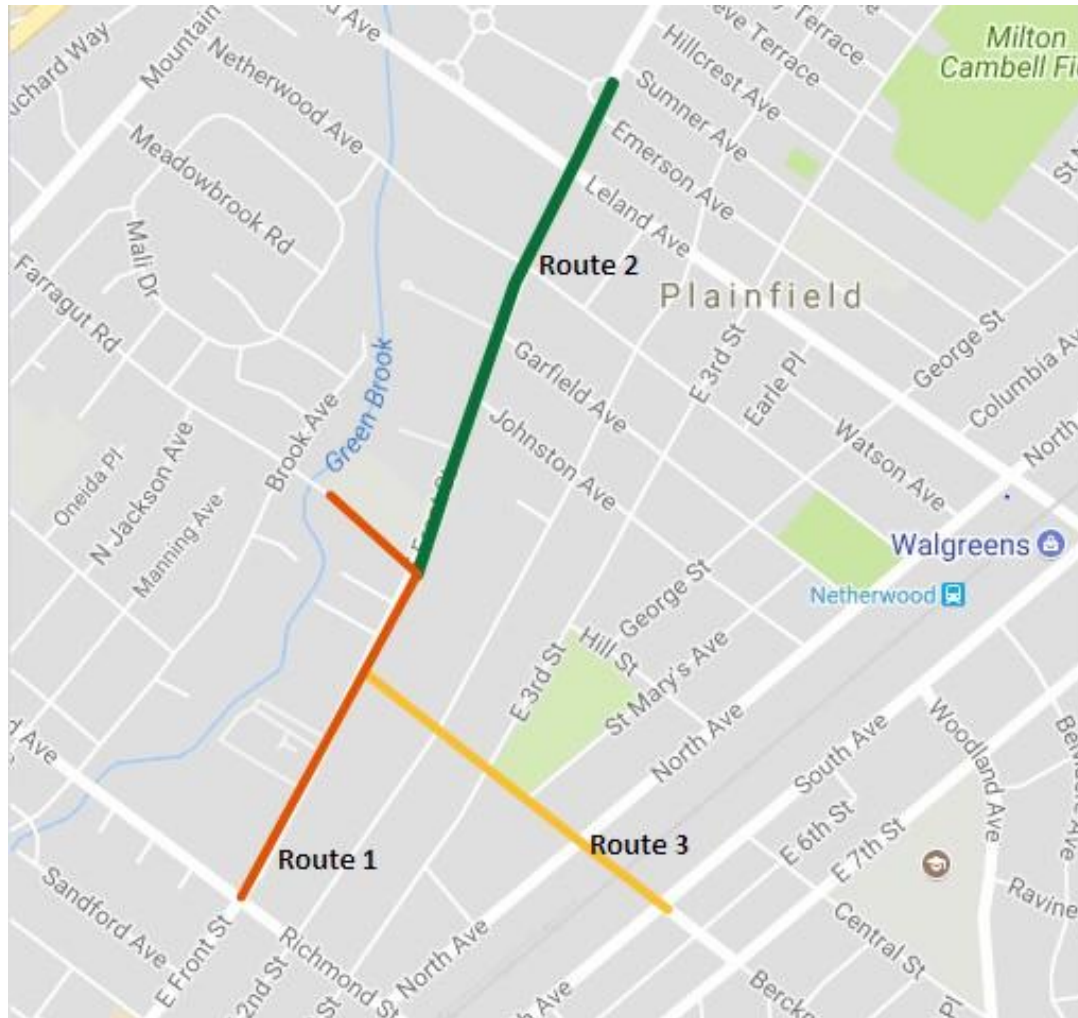
3.3 Walkability Assessment

The SRTS Task Force conducted a walkability assessment of the major routes used by students to get to Dewitt D. Barlow School. School children and residents of all ages and abilities walk in and through the neighborhood. Map 3 below shows the walking routes which were assessed in the audit.

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

Map 4, on the following page, shows all three of the walking routes which were assessed.

Map 4: Main Walking Routes



1. Good Practices



Bold and Visible Signage

Route 1 and 2

-Farragut Rd.



Crossing Guards

Route 1 and 2

- Farragut Rd. and East Front St.

Route 3

- Second St. and Berkman St.

2. Common Problems

2.1 Crosswalk



Faded Crosswalk

Route 1

-Farragut Rd. and East Front St.

Route 2

-East Front St. and Johnston Ave.

-East Front St. and Netherwood Ave.

-East Front St. and Leland Ave.

Route 3

-East Front St. and Berckman St.



No Crosswalk

Route 2

-East Front St. and Garfield Ave.

Route 3

-Berckman St. and East 3rd St.

2. Common Problems

2.2 Sidewalk



Narrow / No Sidewalk

Route 2

-East Front St.

Route 3

-Berckman St.

-Berckman St. and St. Mary's Ave.



Broken/ Uneven Sidewalk

Route 1

-East Front St.

Route 1 and 2

-Farragut Rd.

Route 2

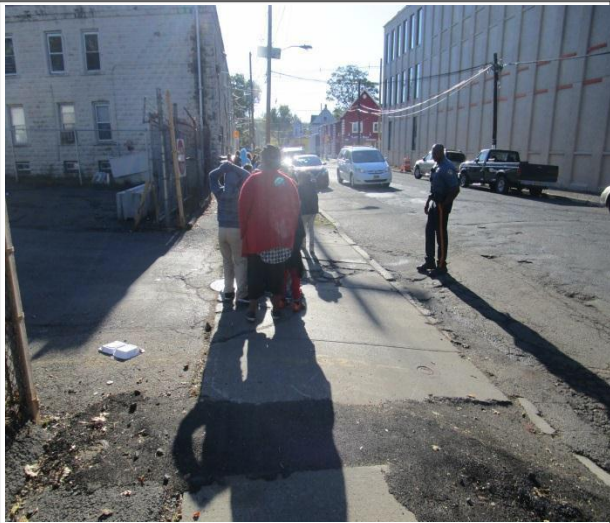
-East Front St.

Route 3

-Berckman St.

2. Common Problems

2.3 Street



Cracked Streets/ Potholes

Route 3

- Berckman St.
- Berckman St. and East 3rd St.
- Berckman St. and South Ave.



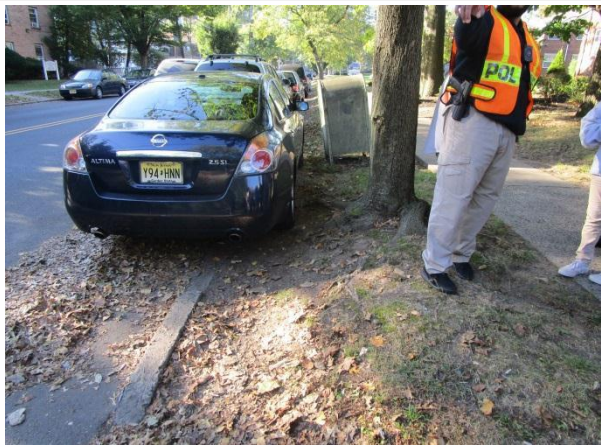
Wide Turning Radii

Route 3

- Berckman St. and East 2nd St.
- Berckman St. and South Ave.

2. Common Problems

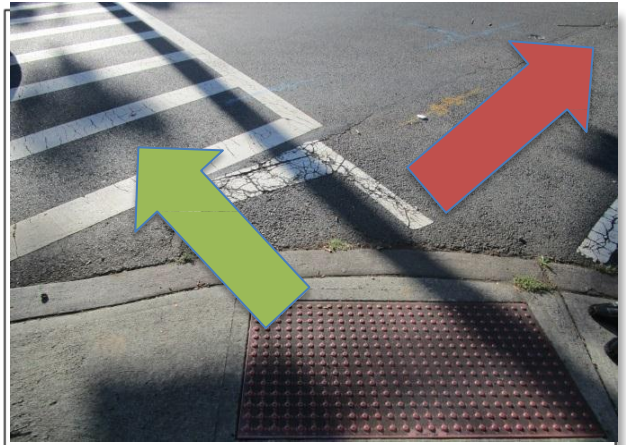
2.4 Other



Illegal Parking

Route 1

-East Front St.



Misaligned or No Truncated Domes

Route 1 and 2

-Farragut Rd. and East Front St.

Route 2

-East Front St. and Garfield Ave.

-East Front St. and Netherwood Ave.

Route 3

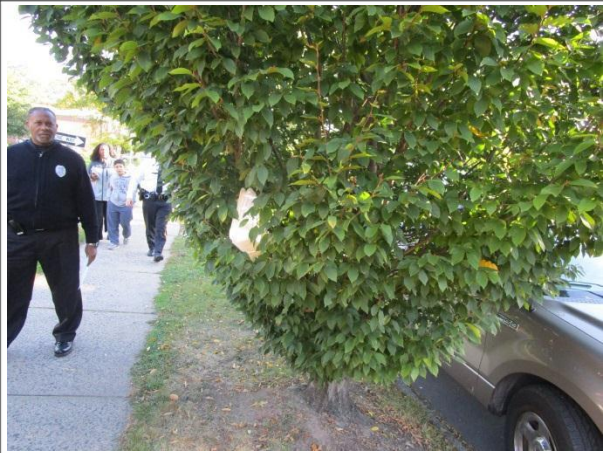
-Berckman St. and East 2nd St.

-Berckman St. and North Ave.

-Berckman St. and East 3rd St.

2. Common Problems

2.4 Other



Overgrown Trees

Route 1

-East Front St.



No Pedestrian Head signal

Route 1

-East Front St. and Farragut Rd.

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 Terrill Middle 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.

Timeframe Definition	Cost Definition
Short-term = less than 3 months	Low = Less than \$2,000
Mid-term = between 3 to 6 months	Medium = between \$2,000 and \$10,000
Long-term = longer than 6 months	High = 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 education annually	School, EZ Ride	Short-term, Mid-term, Long-term	No Cost
Create and/or update Family Handbook that defines arrival and dismissal procedures with map and text that defines drop-off/pick-up areas, the rules and speed limit for driving and parking along local streets within school zone	School, PTO	Long-term	Low
Investigate conducting “Drive Slow and Safe” campaign on East Front St. Notify parents/guardians and school staff by publishing information/updates in the Parent/Family Handbook, School Newsletters and on the school website	School, Police, County	Long-term	Low
Ask Police Department to give a talk regarding driving safely to parents at Back to School Night or PTO meetings	Police, School, PTO	Short-term, Mid-term, Long-term	No Cost
Integrate walking and safety education into classroom curriculum	School	Short-term, Mid-term, Long-term	No Cost
Leverage Social Media to spread awareness of school zone and enforcement activities	School/District, PTO, City, Police	Short-term, Mid-term, Long-term	Low

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

Encouragement Actions	Responsibility	Time Frame	Cost
Encourage City and County to pass and implement Complete Streets Policies	City, County	Mid-term	Low
Hold a student poster or bookmark contest about Walking and Biking to school	School, EZ Ride	Short-term	No Cost
Host Bike/Walk to School Days throughout the school year	School, PTO, EZ Ride	Short-term, Mid-term, Long-term	No Cost
Participate in International Walk and Bike to School day in October and NJ Walk and Bike to School Month in May.	School, PTO EZ Ride	Short-term, Mid-term, Long-term	No Cost
Utilize the school website and newsletters to advance Safe Routes to School safety messages at planned annual dates	School Tech Coordinator	Mid-term, Long-term	No Cost
Establish and organize Bike Trains/Walking School Buses to connect students and families who are already walking or are considering walking/biking	School, PTO EZ Ride	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 and helmet giveaways at Back to School night	School, Police, EZ Ride	Short-term, Mid-term, Long-term	Low
Investigate training police to assist with Walking School Busses	School Liaison, Police	Mid-term, Long-term	Low
Ask police to setup radar feedback signs that post drivers speeds and remind people to not speed in the school zone on East Front Street– twice a year	Police, School Liaison	Short-term, Long-term	Low
Pedestrian Decoy Operation – target unsafe drivers, especially during school commute time	Police, Board of Education	Long-term	Low

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

Engineering Actions	Responsibility	Time Frame	Cost
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Paint or repaint high visibility crosswalks at Farragut Rd & East Front St, East Front St & Johnston Ave, East Front St. & Netherwood Ave, East Front St. and Leland Ave, East Front St. & Berckman	City, County, Engineering, Police	Short-term, Mid-term, Long-term	High
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St., East Front St. & Garfield Ave, Berckman St. & East 3 rd . St.			
Realign truncated dome pads at Farragut Rd & East Front St, East Front St. & Garfield Ave, East Front St. & Netherwood Ave, Berckman St. & East 2 nd St, Berckman St. & North Ave., Berckman St. & East 3rd. St.	City, County, Engineering, Police	Short-term, Mid-term, Long-term	High
Repair / Repave/ Install sidewalks at East Front St, Berckman St, Farragut Rd, Berckman St. & St. Mary's Ave.	City, County, Engineering, Police	Short-term, Mid-term, Long-term	High
Investigate traffic speeds around the school and post speed limit signs/ speed radars as traffic calming concepts	City, County Engineering, Police	Short-term, Mid-term, Long-term	Medium
Install additional School Zone signs that define the school area; install signs with augmented flashing beacons	City, County, Engineering, Police	Short-term, Mid-term, Long-term	Medium
Install bike racks to promote biking to school	School	Short-Term	Low
Install Pedestrian Signal Head at intersection of Farragut Rd. & East Front St.	County, Engineering, Police	Mid-term, Long-term	Medium
Consider how to slow traffic on East Front St. by narrowing lanes, painting bike lane on one side or limiting parking to one side	County, Engineering, Police	Mid-term, Long - term	Medium

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 to measure how effective the SRTS program has been in increasing the number of students walking, biking or carpooling	School, EZ Ride	Short-term, Mid-term, Long-term	Low
Improve communications between school officials and families about bike & pedestrian safety issues/concerns, and provide information and get feedback	School , PTO School Tech Coordinator	Short-term, Mid-term, Long-term	Low
Conduct speed study to evaluate if speed limit is being complied with.	City, Police	Short-Term, Mid-Term	Medium

Conclusion

The walkability audit demonstrated that Plainfield is a very beautiful and walkable community but is made less pleasant and safe due to faded or non-existent crosswalks, cracked/uneven sidewalks, lack of pedestrian signal heads and speeding on East Front Street. Someone in a wheelchair or pushing a stroller would find it extremely difficult to walk on some of the cracked sidewalks. The City should investigate opportunities for making sidewalk repairs through code enforcement or using grants or other infrastructure funding to make the needed repairs. When the EZ Ride team spoke at the Senior Center, we heard from many seniors how difficult and dangerous they feel it is to walk in their community because of broken sidewalks. Our walk audit with the 5th grade students revealed this is an issue for residents of all ages.

Community priorities around Dewitt D. Barlow Elementary School should include painting/repainting high visibility crosswalks and stop bars, repairing and repaving sidewalks to ensure they are level and even, realigning truncated domes to meet ADA compliance, and installing a flashing SLOW/STOP or radar feedback speed limit signage and pedestrian signal heads at the intersection of Farragut Road and East Front Street. This will encourage more students to walk and bike to school by making it safer to walk and easier to cross. Several large tree roots have lifted up the sidewalk and need to be dealt with. One solution is to install concrete beds beneath slate or bluestone pavers to level the sidewalks and prevent further deterioration.

Another recommendation is to reduce traffic, speeding and drop off/pick up congestion in the school zone along Farragut Road and East Front Street by implementing staggered dismissal times, adding other exit and entrance doors for students and narrowing lanes. In order to make room to add a bike lane on one side of the road, the municipality could limit street parking to one side of the road. Through increased use of active transportation practices like walking and biking, residents will make Plainfield a more appealing community to live and visit by reducing air pollution, through decreased emissions and by reducing traffic congestion through lowered vehicle miles traveled within the City.

EZ Ride is proud to work with the community to improve safety and bring SRTS programs to the schools. EZ Ride's Safe Routes to School team has provided incentives to students to walk to school. It is hoped the school will continue to schedule biking and pedestrian safety programs for students in the coming years. This report should be used by the District, City and County to apply for SRTS infrastructure and Transportation Alternatives Set-Aside grants to make the community safer for students, residents and seniors to walk and bike to the school and community programs.

Appendix A

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