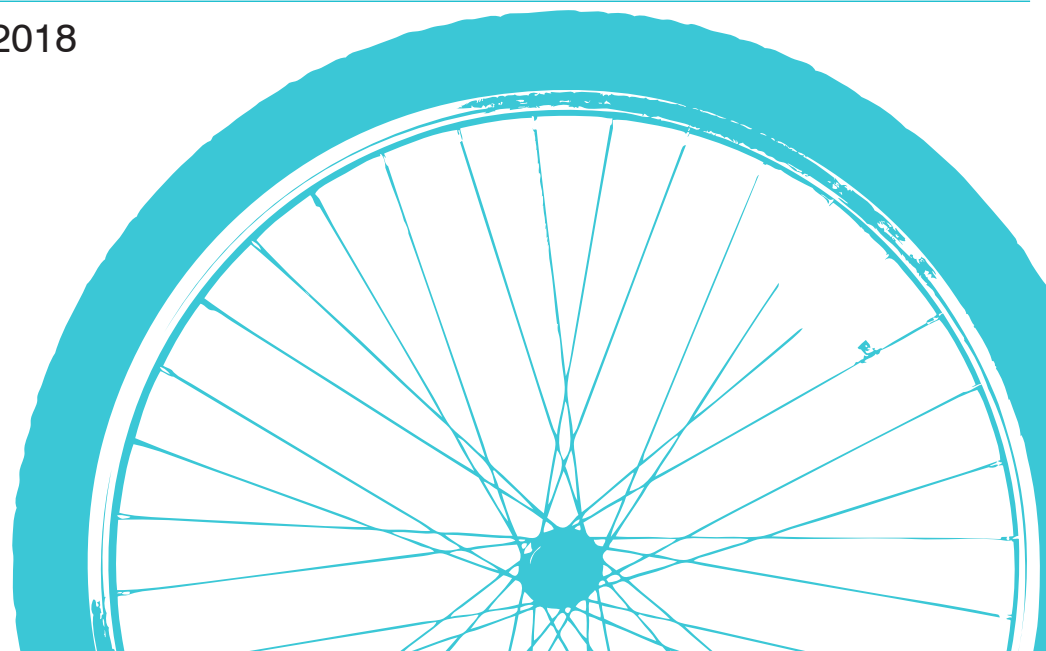


Bound Brook and South Bound Brook, New Jersey

Pedestrian and Bicycle Travel Plan

May 2018



Acknowledgements

The New Jersey Safe Routes to School Resource Center

The New Jersey Safe Routes to School Resource Center assists public officials, transportation and health professionals, and the general public in creating a safer and more accessible walking and bicycling environment through primary research, education and dissemination of information about best practices in policy and design. In partnership with the New Jersey Safe Routes to School Resource Center, Regional Coordinators at the state's eight Transportation Management Associations (TMAs) offer advice and assistance in getting programs off the ground in communities in all 21 counties.

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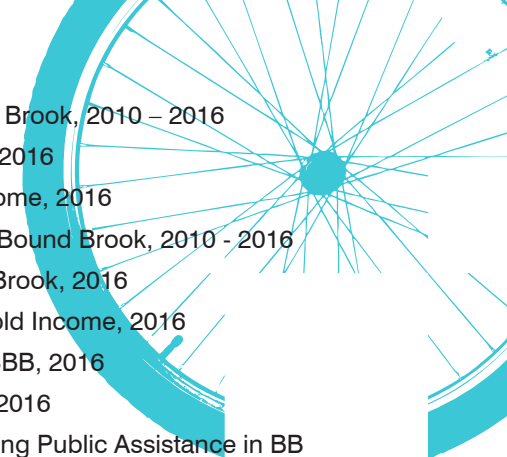
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Introduction



Students learning the correct method of using a crosswalk. Picture provided by Ridewise, Inc.

WHAT IS SAFE ROUTES TO SCHOOL?

Safe Routes to School (SRTS) is an international, federal, state and local effort to create safe, convenient and fun opportunities that encourage children to walk and bicycle to and from school. In 2005, Congress passed legislation that established a National Safe Routes to School program dedicating funds administered through the Federal Highway Administration, and requiring each state to have a Safe Routes to School Coordinator as a central point of contact for the state.

New Jersey Safe Routes to School (NJ SRTS) is New Jersey's statewide initiative led by the New Jersey Department of Transportation (NJDOT) to enable and encourage students to safely walk and bicycle to and from school through education, training and research efforts. The mission of NJ SRTS is to empower and assist communities with identifying issues, creating partnerships and implementing projects and programs to encourage walking and biking to and from school as a safe, daily activity. Safe Routes to School projects can involve physical improvements to the environment as well as encouragement programs to promote more walking and bicycling to and from school. The vision of NJ SRTS is to develop a culture and environment where walking and bicycling to school is safer, more appealing and a part of daily life for students of all abilities throughout New Jersey.



WHAT IS A SCHOOL TRAVEL PLAN?

A School Travel Plan outlines actions to improve bicycle and pedestrian travel to and from schools. It identifies short-term solutions for immediate implementation in addition to long-term solutions that involve further planning. In order to create this document, a School Travel Plan first identifies where students currently walk and bike. Next, it describes where students would walk and bike if they could. Lastly, a School Travel Plan explains what changes are needed so students can and will walk and bike to school. The goal of a School Travel Plan is to increase the number of students who walk and bike to school through improved safety measures.

According to New Jersey Safe Routes to School, there are six required elements of a School Travel Plan. First, a school description is included for context. It should provide demographic information as well as identify special needs. Second, working groups and partnerships are listed. Third, the school neighborhood—approximately a 2-mile area—is mapped. This includes crossing guard and student drop-off/pick-up locations. Fourth, walking and biking barriers and opportunities are identified. This step involves gathering data and information from fieldwork and interviews with parents and the school. Fifth, goals and actions are developed, including a timeline and resources for completion. Sixth, a timeline for evaluation and follow-up steps are created for program monitoring and evaluation.

There are six steps in the process to develop a School Travel Plan. First, establish a working group, including principals, teachers, school board members, parents, students, crossing guards, the mayor, the town administrator, the municipal engineer, police officers, and/or local groups. Second, review existing school and district-wide rules and regulations regarding transportation of students. Third, outline short-term and long-term education and encouragement efforts. Fourth, develop a map of proposed walking and biking routes to school. Fifth, conduct a brainstorming session to identify potential solutions. Sixth, prepare action items based on the five E's—education, encouragement, engineering, evaluation, and enforcement.

A School Travel Plan is an important component of a Safe Routes to School program. It establishes partnerships between the school or school district, municipality, and the surrounding community to implement change. A School Travel Plan also incorporates ideas and actions to make walking and bicycling a safer and more desirable mode of transportation. The existence of a School Travel Plan makes SRTS grant applications more competitive as well. The New Jersey Department of Transportation and New Jersey Safe Routes to School Resource Center websites provide additional information and resources on creating School Travel Plans.

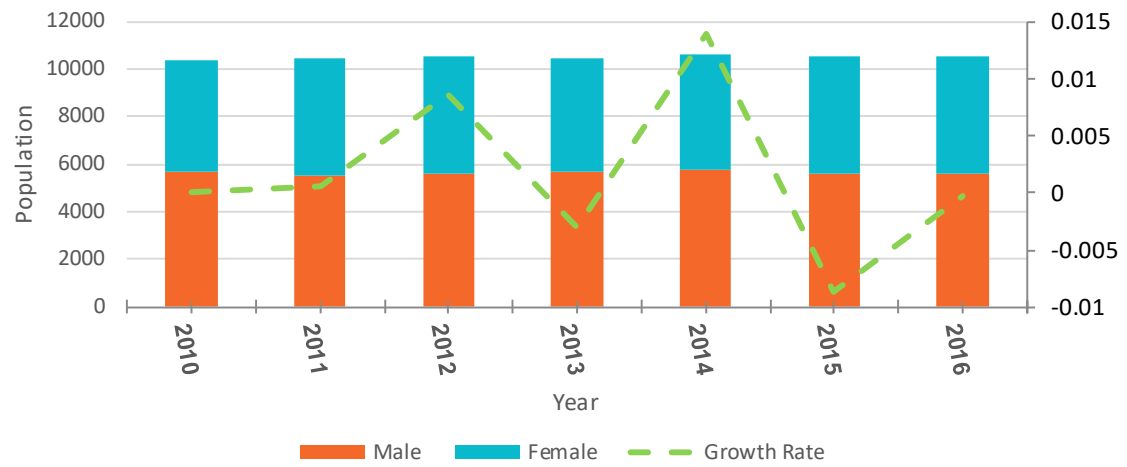
About Bound Brook & South Bound Brook

ABOUT BOUND BROOK

Bound Brook History and Characteristics

Bound Brook was first settled by the Dutch in the 1680s. Its historic Stone Arch Bridge was built in 1731. A bridge over the Raritan River was built in 1761, which connected the town to South Bound Brook. In 1777, this bridge played an important role in the Battle of Bound Brook during the Revolutionary War and it is where General Washington raised Betsy Ross's American flag for the first time.⁴ Rail transportation came to Bound Brook in 1840 and the station was completed in 1919. In the mid-twentieth century, heavy industrialization was the backbone of the economy. Because it is surrounded by water on three sides, Bound Brook has been subjected to flooding throughout its history.⁴ In 1999, Hurricane Floyd flooded Downtown Bound Brook destroying many residences and businesses. Recent Army Corps of Engineers projects including constructing levees, floodwalls, pump stations and other improvements to reduce or eliminate the impacts of heavy flooding events.⁵

Figure 1: Bound Brook Population Change, 2010-2016



Bound Brook Demographics

Bound Brook's population has remained steady over the past five years, hovering between 10,200 and 10,500 residents. Its median age (34.3) is lower than that of New Jersey (39.5) and Somerset County (41.1). As such, it has a smaller proportion of seniors (10.1%) than New Jersey (21.3%) and Somerset County (20.4%). It has a higher proportion of school-aged children (18.8%) than New Jersey (16.6%) and Somerset County (17.9%).⁶

Table 1: Bound Brook Population Characteristics, 2010-2016

	Bound Brook	Somerset County	New Jersey
Median Age	34	41	40
School-Aged Children	19%	18%	17%
Senior Population	10%	20%	21%
Total Population	10,512	331,686	8,915,456

Bound Brook is 85% white, 5% black or African American, 2% Asian, <1% American Indian or Alaska Native, 1% two or more races, and 7% some other race. Almost half, 48.5%, of the population of any race identifies as Hispanic or Latino.⁶

Figure 2: Bound Brook Race, 2016

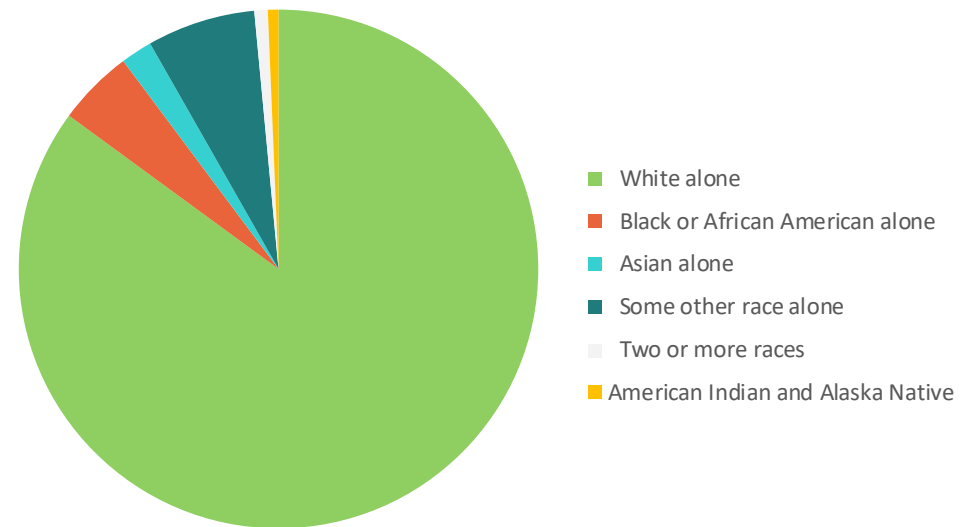
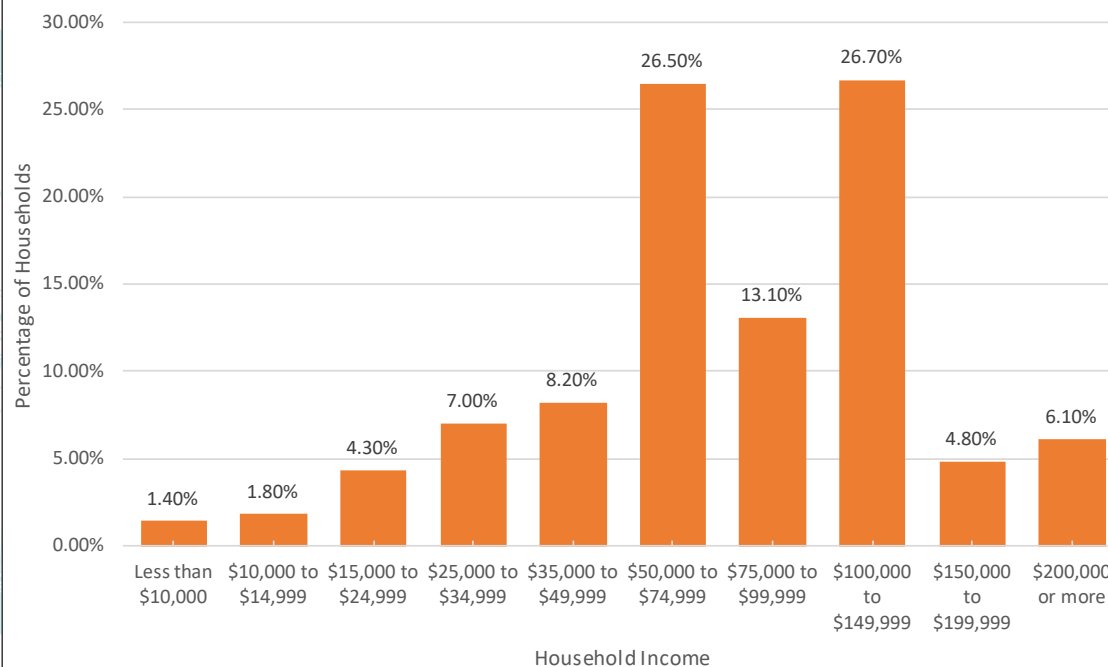


Figure 3: Bound Brook Household Income, 2016



Bound Brook's median household income is \$66,300, and its mean household income is \$86,140. Almost 4% of Bound Brook households make less than \$10,000 annually.⁶

Existing Policies in Bound Brook

Downtown Bound Brook has received planning attention in recent years. It is designated by NJDOT and NJ Transit as a Transit Village and its street pattern lends itself to walking⁷. The Urban Land Institute published a redevelopment plan which highlighted the rehabilitation and restoration of the Historic Bound Brook Village Center, the preservation and restoration of the Old Town Preservation Neighborhood, and the development of a strong commercial tax base.⁸

A Downtown Urban Design Plan was released in 2010, which recommended limiting residential uses to the second floor and above, reevaluation of parking and set-back requirements, improving wayfinding, and investing in capital improvements.⁹ A Complete Streets Resolution was passed in 2015 by the municipal council to meet the transportation and mobility needs of all of its citizens, regardless of age or ability.¹⁰ In 2016, Bound Brook applied for a Safe Routes to School grant but was denied. Its plan centered upon physical improvements to sidewalks, its successful Walk to School Days, and treatments to slow traffic.

The Supporting Priority Investment in Somerset County Phase III, June 2017 report, encourages more development along Talmadge Avenue by reducing speeds and truck usage, increasing wayfinding, and improving the pedestrian experience through street trees and lighting. It promotes pedestrian accessibility to Queens Bridge and between South Bound Brook and Bound Brook, especially along routes to the train station.¹¹ A Master Plan Reexamination Report was released in 2017, which encourages greater consistency between planning sub-areas and reinvestment in the public right-of-ways.¹²



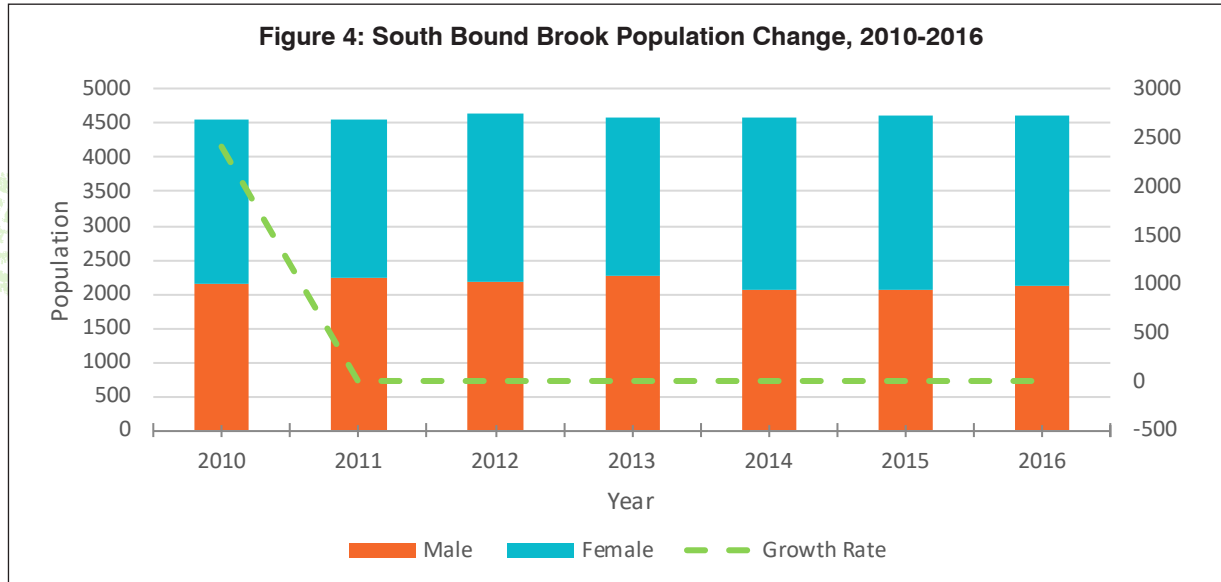
ABOUT SOUTH BOUND BROOK

South Bound Brook History and Characteristics

South Bound Brook was incorporated as a borough in 1907, but the area had been settled since 1681. In 1761, a bridge spanning the Raritan River was built and was used by both British and American armies during the Battle of Bound Brook in the Revolutionary War.¹³ One of South Bound Brook's most important historical sites is the Abraham Staats House, which is listed on the National Register of Historic Places. It survives from the era of Dutch settlement.¹⁴

Throughout the 20th century, GAF Manufacturing was a major employer in South Bound Brook. It closed in 1984, and the site was recently redeveloped into townhouses. This project provided public access to the Delaware and Raritan Canal. The D&R Canal State Park runs along the northern and eastern boundaries of the town and is a popular spot for walking, bicycling and jogging, as well as fishing, kayaking, and canoeing.¹⁵

Figure 4: South Bound Brook Population Change, 2010-2016



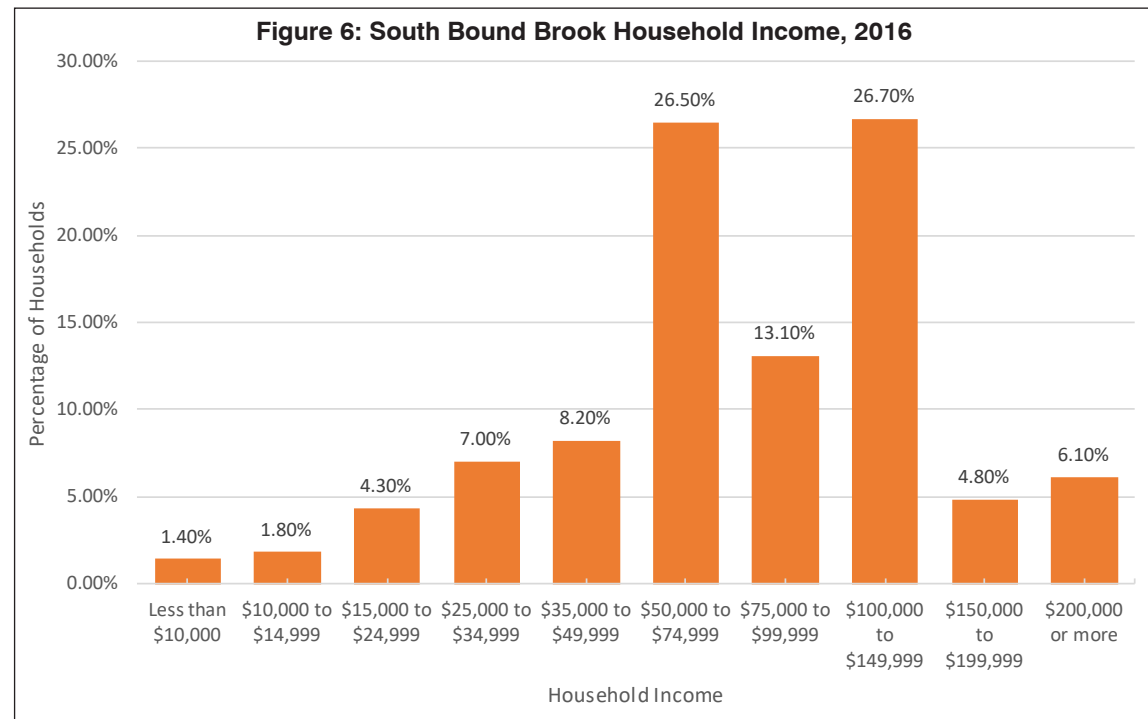
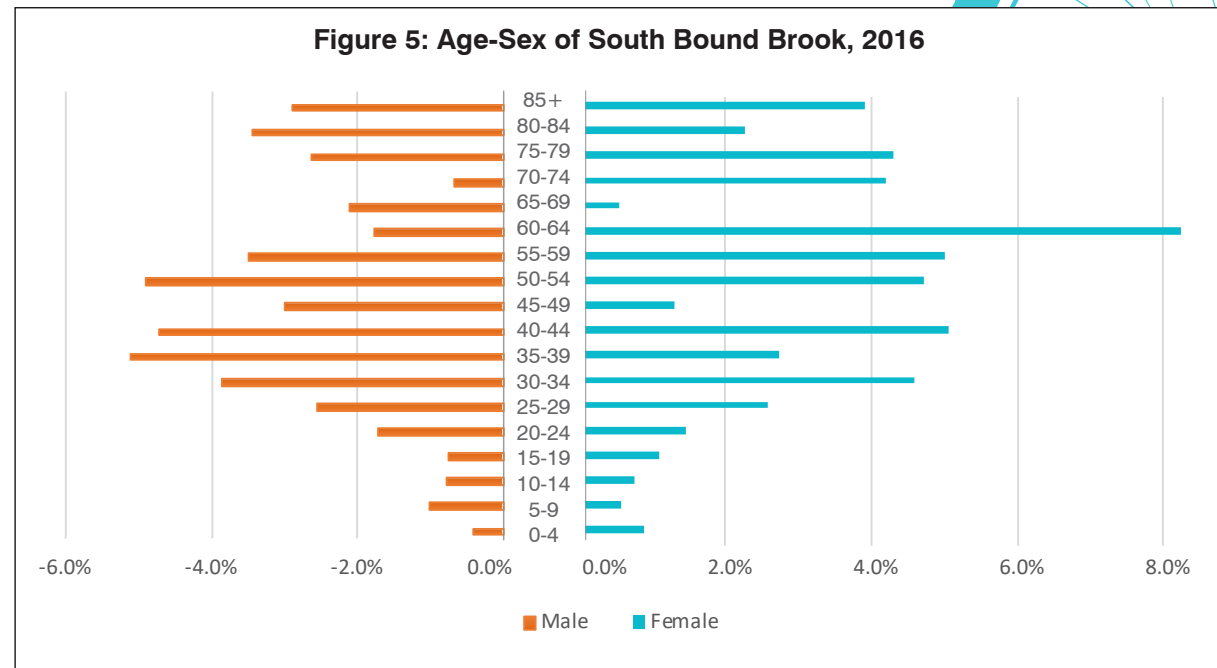
South Bound Brook Demographic Profile

Based on the American Community Survey, the total population of South Bound Brook has been fluctuating between 4,555 to 4,653 since 2010 to 2016. In 2016, its median age at 38 is slightly lower than that of Somerset County (41.1) and the state of New Jersey (39.5). Similarly, its proportion of school-aged children (15.2%) is slightly lower than that of Somerset County (17.9%) and the state of New Jersey (16.6%). Noticeably, its proportion of senior population (9.4%) is significantly smaller than that of Somerset County (20.4%) and New Jersey (21.3%).¹⁶

Table 2: South Bound Brook Population Characteristics, 2010-2016

	South Bound Brook	Somerset County	New Jersey
Median Age	38	41	40
School-Aged Children	15%	18%	17%
Senior Population	9%	20%	21%
Total Population	4,613	331,686	8,915,456

Age by Sex South Bound Brook's population of males is 2,114 in 2016, while the female population is 2,499. The population pyramid in Figure 5 illustrates South Bound Brook as a developed borough. There is a large proportion of middle-age population. The largest cohorts are between 35-39 and 45-49 years old.¹⁶



Races South Bound Brook is 70.1% white, 10.4% Asian, 8.4% black or African American, 8.2% two or more races, and 2.9% some other races.¹⁶

Income South Bound Brook's median income is \$77,713 (2016), and its mean household income is \$91,356, as shown in Figure 6. The largest proportions of household income groups are from \$50,000 to \$74,999 (26.5%) and from \$100,000 to \$149,999 (26.7%). 3.2% of households make less than \$15,000 annually.¹⁶

Existing Policies in South Bound Brook

The Supporting Priority Investment in Somerset County Phase III Study report finds three potential redevelopment sites: the GAF Research Building, the Municipal Building and Garage, and the Black Belt Auto Site. This report also recommends a number of multimodal transportation improvements, including the adoption of a Complete Streets Policy, lowering the speed limit, developing a school travel plan, and improving access to Bound Brook and to the D&R Canal.¹¹

The redevelopment of the former GAF site was in line with these recommendations. Working with the New Jersey Department of Environmental Protection, the area was designated Redevelopment Area in 1998. Two grants from the Hazardous Discharge Site Remediation Fund covered the costs of a Preliminary and Site Investigation with NJDEP oversight.¹⁷ According to the NJ Office of Smart Growth's "Changing the Face of NJ" Handbook, the project includes 152 townhouses, public access to the D&R Canal, 23,000 square feet of retail, and 18 apartments.¹⁸

In May 2017, the Planning/Zoning Board approved a re-examination of the borough's Master Plan.¹⁹ The re-examination included recommendations to changes in borough codes to define existing conditions such as the presence of family and child day care centers, restaurants and fast food, solar panels, and commercial signage. The reexamination also notes that parking standards are generally high and that shared parking on Main Street could help spur revitalization by lowering construction costs.¹⁹ Notably, churches are not included in any zoning districts and must be added to the code. The re-examination also looks at previous plans and state policy changes and finds three sites for affordable housing development.¹⁹



HEALTH PROFILE

According to the US Census 2012-2016 American Community Survey, in Bound Brook, 16.6% of those under age 18 and 5.8% of those over age 65 are living below the poverty line.⁶ In Bound Brook, the group with the highest rate of poverty at 23.4% is single mothers with related children under age 18. Household income, shown in Figure 7, is varied with 15.8% of the population earning less than 25K, 20.5% of the population earning 25K to 50K, 21.8% of the population earning 50K to 75K, and 41.9% of the population earning more than 75K. Of these annual earnings, 24.4% include Social Security, 3.8% include SNAP, and 1.3% include cash public assistance. Race and ethnicity in Bound Brook is 48.5% Hispanic, 44.3% White, 4.6 Black/African-American, and 1.9% Asian.

In South Bound Brook in 2016, 3.8% of those under age 18 and around 1.6% of those over age 65 are living below the poverty line.¹⁶ In South Bound Brook, the group with the highest rate of poverty at 7.3% is single mothers with related children under age 18, shown in Figure 8. Total annual household earnings are relatively high with 7.5% earning less than \$25 K, 15.2% earning \$25 to 50K, 34.7% earning \$35k to 75k, and 50.7% earning over \$75K. Of these annual earnings, 22% include Social Security, 4.5% include SNAP, and

Figure 8: Poverty Status in Bound Brook and South Bound Brook, 2016

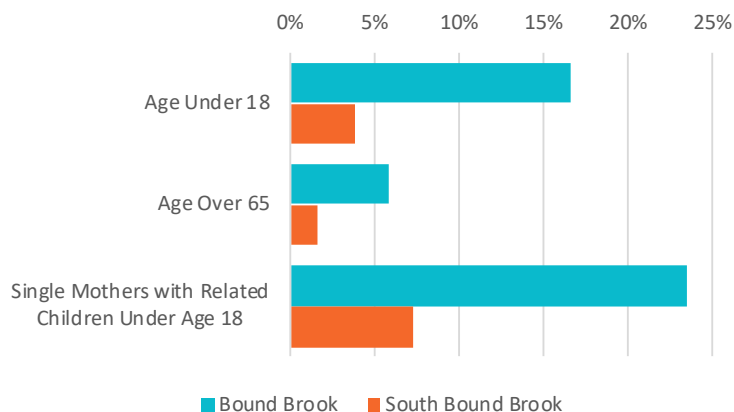
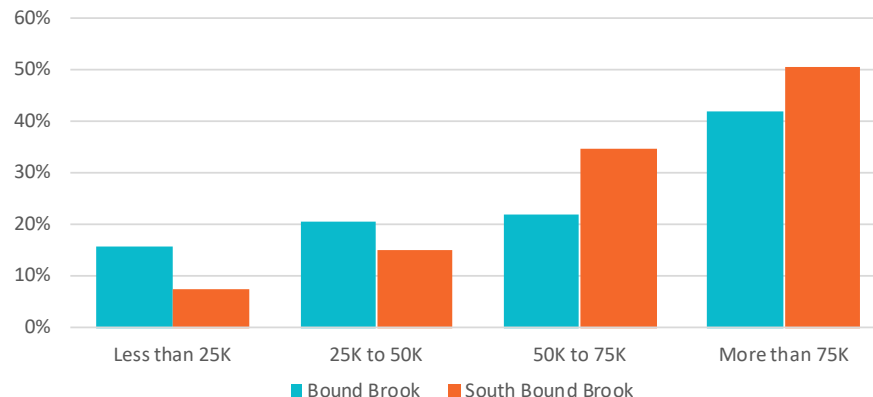


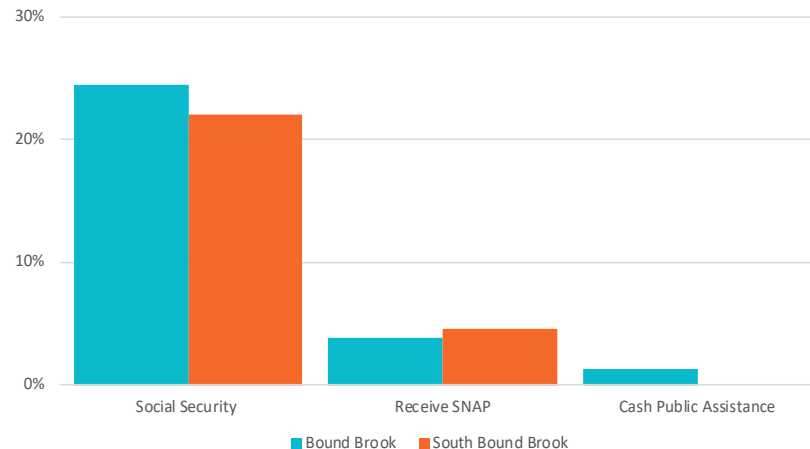
Figure 7: Household Income in Bound Brook and South Bound Brook, 2016



nearly no household received cash public assistance, shown in Figure 9. Race and ethnicity in South Bound Brook is 70.1% White, 10.4% Asian, 8.4% African American, followed by 8.2% of population with two or more races.¹⁶

Somerset County is ranked 3rd in NJ for Health Outcomes according to the County Health Rankings and Roadmaps from the Robert Wood Johnson Foundation.²⁰ The data also shows that Somerset County has better health factors, such as health behaviors, clinical care, social & economic factors, and physical environment than is typical of New Jersey.²⁰ It is ranked second in NJ for overall Health Factors. However, Bound Brook differs from Somerset County overall due to current social, economic, and environmental conditions.²⁰

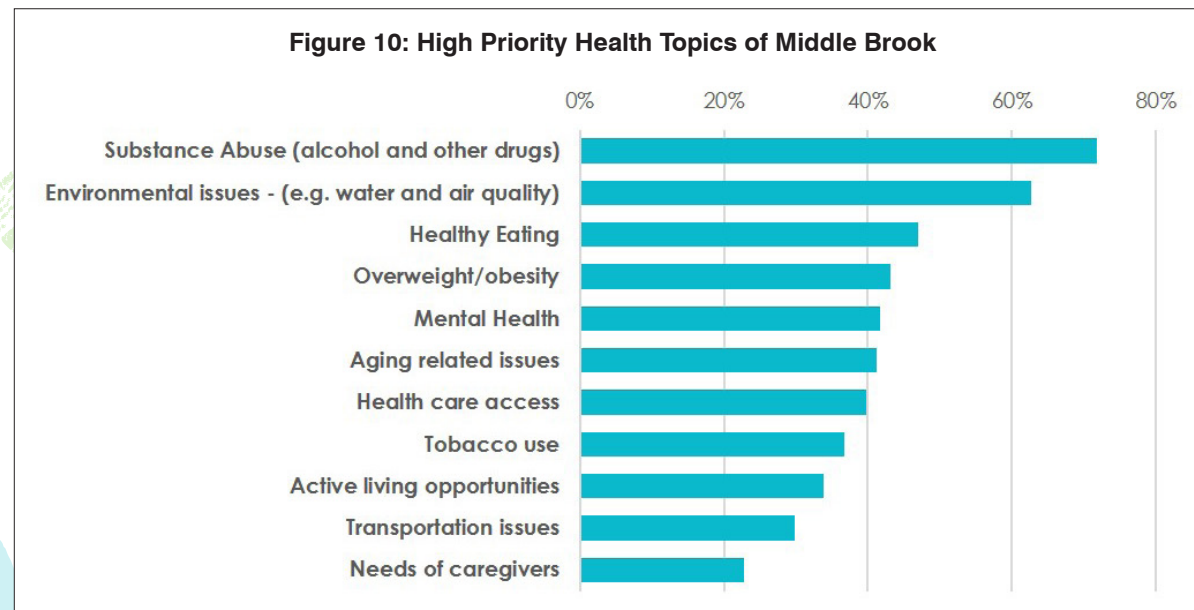
Figure 9: Percent of Population Receiving Public Assistance in Bound Brook and South Bound Brook, 2016



Health Concerns

In 2015, Robert Wood Johnson University Hospital (RWJUH) Somerset in partnership with the Healthier Somerset Coalition undertook a community health needs assessment (CHA) of the communities it serves. A telephone survey was administered using a random-digit dial sampling methodology with approximately 50% landline respondents and 50% cell phone respondents.²¹ The aim was to yield a sample with similar characteristics to the Somerset County population overall. The survey was offered in English and Spanish. Qualified respondents were adults ages 18+ who live in Somerset County, NJ. A total of 2,002 respondents completed the 30-question telephone survey.²¹

The results, shown in Figure 10, are broken down to the regional level based on health commission jurisdictions.¹ Bound Brook and South Bound Brook are included in the data presented for the Middle Brook Regional Health Commission, which also includes Green Brook, Warren, and Watchung. This data is considered to be more representative of Bound Brook and South Bound Brook than the overall county data.



Substance Abuse Around one-quarter (25.1%) of survey respondents in the Middle Brook Regional Health Commission area self-reported binge drinking at least one a month compared to the national rate of 16.8%. Yet, the CDC's Behavioral Risk Factor Surveillance System 2011 data for the central region of Somerset County did not show higher rates of alcohol consumption. It did show the percentage of people that reported smoking every day was more than twice as high than in the northern region of Somerset County.¹

Obesity In the 2015 Middle Brook Regional Health Commission survey, a higher percentage of respondents reported being obese (9.1%) and eating no servings of vegetables daily (6.2%) in comparison to other regions of Somerset County. There are higher rates of obesity among the population of western Bound Brook than eastern Bound Brook or South Bound Brook. Middle Brook RHC residents were 50% more likely to have a diagnosis of diabetes (9.3%) than residents of the county as a whole (6.2%).¹

The CDC's Behavioral Risk Factor Surveillance System 2011 data also showed that respondents from the central region of Somerset County were more likely to report high cholesterol levels (39%) than the northern (34.5%) or southern (35%) areas. Almost double the percentage of respondents from the central region were advised by physicians to lose weight in comparison to the northern region.¹



Asthma According to the CDC's Behavioral Risk Factor Surveillance System 2011 data, residents of central Somerset County reported asthma diagnoses at a higher percentage (14%) than the two nearby regions (11.6% and 9.8%).¹

Mental Health According to the CDC's Behavioral Risk Factor Surveillance System 2011 data, a higher percentage of residents in central Somerset County reported suffering from both anxiety (12.3%) and depressive disorders (15.1%) than residents of the rest of the county. Also, significantly more residents of the

central region reported 3 or more days in the past 14 days of feeling "down, depressed or hopeless" (13.8%) than those in the rest of the county.¹

Health Access According to the CDC's Behavioral Risk Factor Surveillance System 2011 data, fewer residents of central Somerset County reported having health insurance of any kind (83.8%) than in other parts of Somerset County. The southern and western portions of Bound Brook have the highest proportion of uninsured populations (over 20%) while the northern area has the lowest.¹

Residents of the central region of Somerset County were also much more likely—two to five times higher—to report they did not seek medical care or prescriptions due to cost or transportation. There is a behavioral health treatment facility located in central Bound Brook, but there are no major hospitals within these two towns. The Robert Wood Johnson University Hospitals in Somerville and New Brunswick and Saint Peter's Hospital in New Brunswick are within 15 miles, however public transit to these facilities is limited.¹



Social Determinants of Health

As defined by Healthy People 2020, social determinants of health “are conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.”²² These determinants are shaped by the how much money, power, and resources people have. Factors that are included in determining health outcomes include safe and affordable housing, educational attainment, employment, safe and accessible transportation, food security, etc.²² The following topics contribute to social determinants of health.

Crime According to annual crime data, the crime rate in Bound Brook is 21% lower than the average for New Jersey and 48% lower than the national average. For violent crimes, Bound Brook has a rate 53% lower than the average for New Jersey and 71% lower than the national average in 2016. South Bound Brook has a rate 47% lower than the average for New Jersey and 67% lower than the average for United States.¹

In terms of property crime, Bound Brook has a rate 22% lower than the average for New Jersey and 51% lower than the national average. Similarly, the city property crime rate in South Bound Brook was 47% and 66% lower than the state and national property crime rate average. In 2015, the State Police reported the overall crime rate per 1,000 was 16 for Bound Brook Borough and 9.1 for South Bound Brook, while there is 11.1 for Somerset County.²³ CDC’s Behavioral Risk Factor Surveillance System 2011 data for the central region of Somerset County, which includes Bound Brook and South Bound Brook, shows fewer people reporting feeling “very safe” in their neighborhoods (79.2%) than in the other two regions (93.5% and 87.3%).¹

Food Access Based on the USDA’s Food Access Research Atlas data for 2015, the southeastern portion of Bound Brook—south of Union Avenue and west of Thompson Avenue—is classified as a low income low access census tract, where a significant number of residents are more than 1/2 mile (urban) or 10 miles (rural) from the nearest supermarket. The whole South Bound Brook is classified as low access at 1/2 or 10 miles.²⁴ There are many food stores in and near Bound Brook while most of the food stores in South Bound Brook are located on Main Street.

Parks There are a variety of park and recreation areas in Bound Brook, including Billian Legion Park, Codrington Park/Ben Maggio Recreation Center, Middle Brook Park, Rock Machine Field, and Tea Street Sports Complex.²⁵ Due to the limited space in South Bound Brook, the numbers of park are limited, there are only Canal Park and Memorial Park.^{26 27}

Public Transportation NJ Transit bus routes 65, 114, and 117 have a stop in Bound Brook at the intersection of Union Avenue and Tea Street.^{28 29} Somerset County also offers several shuttle routes that stop in Bound Brook and South Bound Brook.³⁰ Lastly, there is an NJ Transit train station in Bound Brook along the Raritan Valley Line, serving both Bound Brook and South Bound Brook.³¹

Bound Brook & South Bound Brook School Districts

BOUND BROOK SCHOOL DISTRICT

Bound Brook is home to three elementary schools, one middle school, and one high school. LaMonte Annex serves 367 students in Pre-Kindergarten, Kindergarten, and Grade 1. Lafayette School serves 278 students in Grades 2 and 3. Smalley School serves 358 students in Grades 4, 5 and 6.³² These schools open for student arrival at 7:50am and classes begin at 8:10am. School dismisses at 2:40pm.³³ Between 75% and 79% of students at these schools are considered economically disadvantaged, meaning these students are eligible for free or reduced lunch.³² One in every 4 students in Grades 2 and 3 are English Language Learners, as are 1 in every 5 students in the other elementary schools. Each elementary school provides breakfast after the bell.³²

Community Middle School serves 236 students in Grades 7 and 8. School begins at 7:35am and ends at 3:00pm. Bound Brook High School serves 551 students from Bound Brook and South Bound Brook, in Grades 9-12. School begins at 7:30am and ends at 2:52pm.³³ 80% of middle school and 63% of high school students are economically disadvantaged, as shown in the chart below. 11% of middle school students and 13% of high school students are English Language Learners. Both the middle and the high school provide breakfast after the bell.³²

Existing Policies

Bound Brook School District's Wellness Policy encourages physical activities during recess and after school, but does not specifically outline walking or biking to school as a way achieve exercise goals. It primarily focuses on nutrition and healthy eating, and breakfast is provided after the bell in Bound Brook schools.³⁴ Bound Brook's elementary schools have hosted Walk to School Days. There are separate district policies regulating walking and biking to school, which are outlined below.

The Bound Brook School District has in place three policies outside of the Wellness Policy that address walking and biking:

District Policy 5514—Student Use of Vehicles on School Grounds

outlines student bicycle use. Students are allowed to ride bicycles to Bound Brook High School, Community Middle School, Smalley Elementary School, Lafayette Elementary School, LaMonte Elementary School, and LaMonte Annex Elementary School. Students must comply with state and local laws and must park bikes in a designated area outside the school building. Each school principal may develop school rules for the operation of student bicycles on school grounds.³⁵

District Policy 5514.5—Walking and Biking to School was adopted in October of 2017 and is a comprehensive policy that lists the benefits of walking and bicycling to and from school and specific guidelines including that students under 17 years of age must wear a helmet, students in Grades 1-3 should be accompanied by an adult, bicycles should be walked on school grounds, bicycles should be locked, and students should wear bright and reflective clothing.³⁵



Students walking to school as part of a Walking School Bus. Picture provided by Ridewise, Inc.

Table 3: Bound Brook School District School Details

School Name	Enrollment	Grade Levels	Arrival Time	Dismissal Time	Economically Disadvantaged Students	English Learners	Homeless
LaMonte / Annex	367	Pre-K, K, 1	7:50-8:10 AM	2:40 PM	75%	21%	1%
Lafayette	278	2-3	7:50-8:10 AM	2:40 PM	77%	25%	2%
Smalley	358	4-6	7:50-8:10 AM	2:40 PM	79%	20%	1%
Community Middle School	236	7-8	7:35 AM	3:00 PM	80%	11%	1%
Bound Brook High School	551	9-12	7:30 AM	2:52 PM	63%	13%	0%
Green Brook Academy	35	7-12+	n/a	n/a	n/a	n/a	n/a

Table 4: Bound Brook School District Ethnicity

School Name	Hispanic	White	Black/African American	Asian	American Indian or Alaska Native	Two or More Races
LaMonte / Annex	76%	11%	7%	1%	2%	3%
Lafayette	76%	14%	10%	0%	1%	0%
Smalley	78%	10%	7%	2%	0%	2%
Community Middle School	75%	12%	11%	1%	0%	1%
Bound Brook High School	62%	20%	15%	2%	0%	1%

District Policy 7461— District Sustainability Policy

was adopted in August of 2017 and states “Safe Routes to School is a nationwide movement aimed at encouraging elementary and middle school students to walk or bicycle to school. The goal of New Jersey’s Safe Routes to School initiative is to get children walking and bicycling to school where it is safe and to make it safe where it is not safe. In support of this initiative, the Board has adopted Policy 8505—Local Wellness Policy/Nutrient Standards for Meals and Other Foods, Policy 8600—Transportation, and Policy 5514—Student Use of Vehicles. The Board of Education and the administration will collaborate with municipal, county or State transportation, land-use planning, law enforcement, and other agencies to plan, construct, and encourage the use of safe, accessible, and convenient pedestrian and bicycle routes to and from school.³⁷

Bound Brook Student Expectation Manuals Some limited information about walking, bicycling or wheeled sport travel and behavior are part of the Student Expectation Manuals.³⁸ The Bound Brook High School Student Expectations Manual lists “walk on sidewalks” under school ground rules and does not have any information about bicycling.³⁹ The Bound Brook Elementary School Student Expectations Manual does not have any information about walking or bicycling, but does prohibit scooters and skateboards under the “Toys” section.⁴⁰ The Bound Brook Middle School Student Expectations Manual lists the following during arrival and dismissal:

- Stay in designated areas and on walkways.
- Walk
- Keep hands and feet to yourselves
- Pay attention to your surroundings
- Be respectful of community members
- No skateboarding or bicycle riding on school grounds⁴¹

Bound Brook School Travel Tallies

Student Arrival and Departure Travel Tallies show how children travel to and from school. They are taken by teachers for two or three days (Tuesday, Wednesday, Thursday) during one week. Travel Tallies were taken at all schools in each town, Bound Brook and South Bound Brook. The Bound Brook tallies were taken in October 2017 while the South Bound Brook tallies were taken in January 2018.

LaMonte/Annex School This elementary school includes Kindergarten and Grade 1. Figure 11 shows the results from the student arrival and departure travel tallies taken in October 2017. Based on the travel tallies, LaMonte/Annex students are predominantly driven to and from school in a family vehicle. A higher percentage of students travel by family vehicle in the morning as compared to the afternoon. The weather conditions did not significantly alter student travel overall. Travel by school bus and walking are the next most popular travel modes after family vehicles. Something interesting to note is three percent of students bike in the afternoon, yet zero percent bike in the morning.

Lafayette Elementary School This elementary school includes grades 2 and 3. Figure 12 shows the results from the student arrival and departure travel tallies taken in October 2017. Based on the travel tallies, Lafayette Elementary students are predominantly driven to and from school in a family vehicle. A higher percentage of students travel by family vehicle in the morning as compared to the afternoon. The weather conditions did not significantly alter student travel overall. Travel by school bus and walking are the next most popular travel modes after family vehicles. A higher percentage of students travel by school bus and walking in the afternoon as compared to the morning. There is more carpooling at Lafayette Elementary than biking. Even though “other” only accounts for 2% and 4% of daily travel, this is the highest percentage among Bound Brook Schools.

Figure 11: LaMonte/Annex School Morning and Afternoon Travel Modes Comparison, October 2017

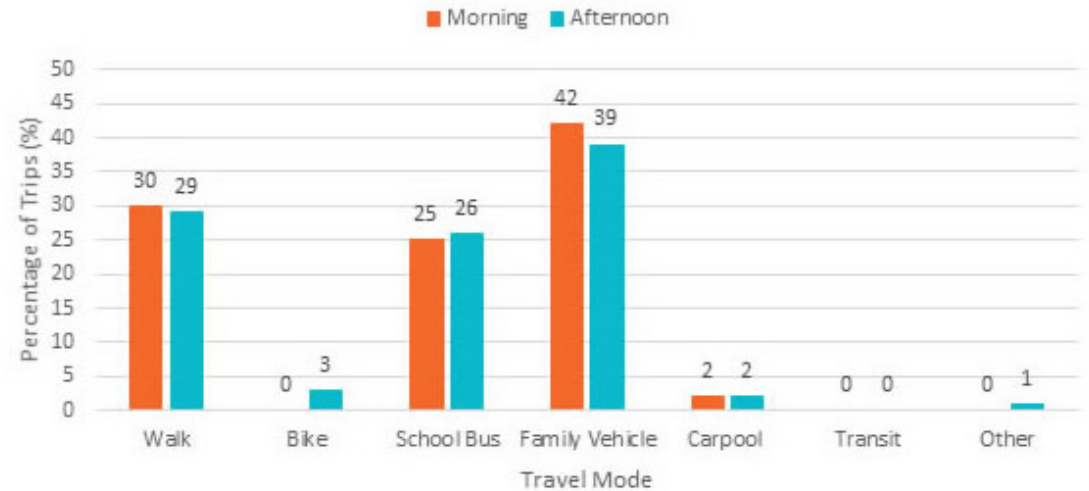


Figure 12: Lafayette Elementary School Morning and Afternoon Travel Modes Comparison, October 2017

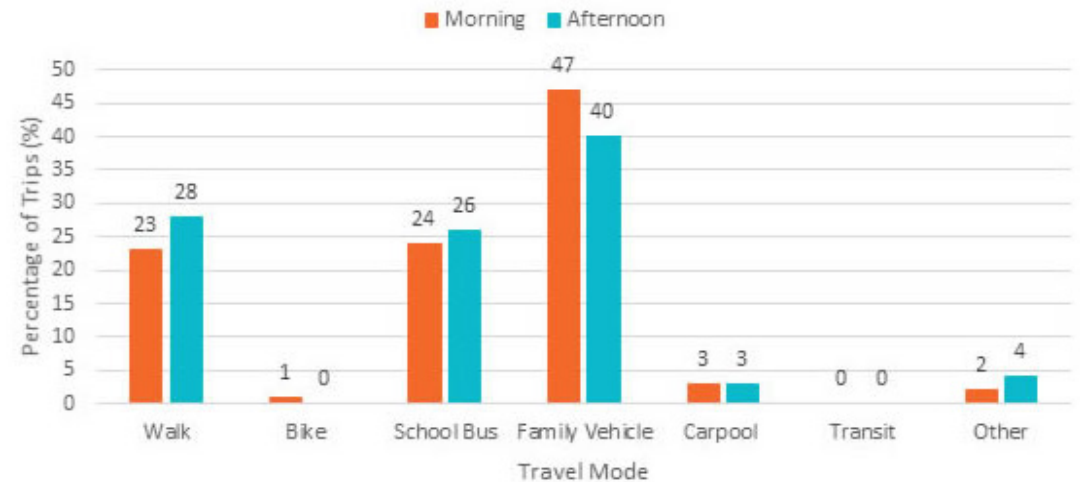
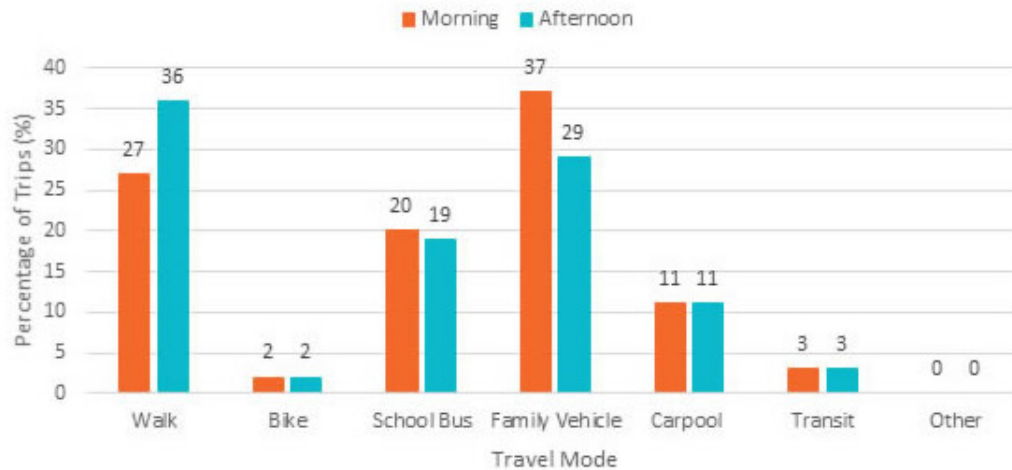
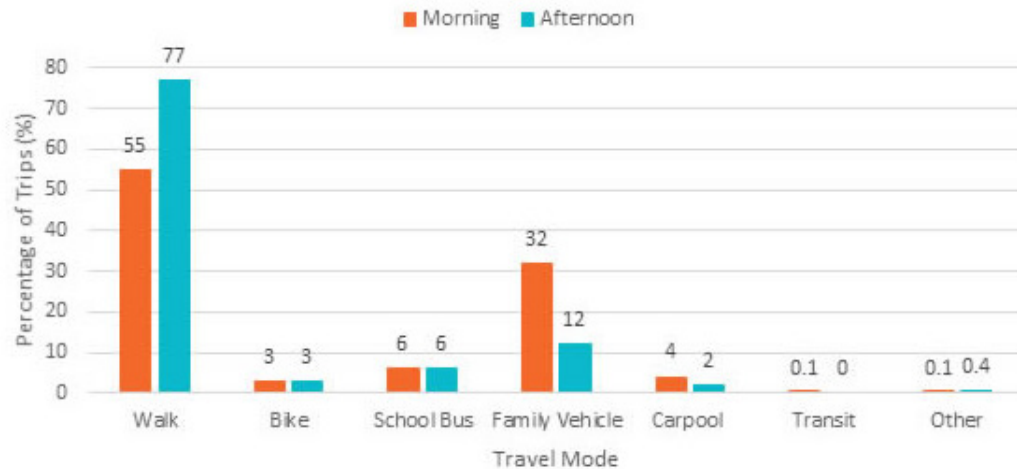


Figure 13: Smalley Elementary School Morning and Afternoon Travel Modes Comparison, October 2017



Smalley Elementary School This elementary school includes Grades 4-6. Figure 13 shows the results from the student arrival and departure travel tallies taken in October 2017. Based on the travel tallies, most Smalley Elementary students are driven to and from school in a family vehicle or walk to and from school. A higher percentage of students travel by family vehicle in the morning and a higher percentage of students walk in the afternoon. The weather conditions did not significantly alter student travel overall. Travel by school bus is the next most popular travel mode. There is by far more carpooling at Smalley Elementary than other Bound Brook schools. This was the only school to have a notable level of transit use at three percent. Even though biking only accounts for 2% of daily travel, this is the second-highest percentage among schools.

Figure 14: Community Middle School Morning and Afternoon Travel Modes Comparison, October 2017



Community Middle School This school includes the oldest students in grades 7 and 8. Figure 14 shows the results from the student arrival and departure travel tallies taken in October 2017. Based on the travel tallies, Community Middle students predominantly walk to and from school with a higher percentage of students walking home. The weather conditions did not deter students, as an even greater percentage (73%) walked in snowy conditions than sunny (67%). Travel by family vehicle is the second-most popular travel mode. The percentage of students arriving at school by family vehicle is over double the percentage departing school by family vehicle. Even though biking only accounts for 3% of daily travel, this is the highest percentage among Bound Brook Schools.

A Note on Bus Use A pair of private bus start-ups in Bound Brook run what is locally referred to as a school bus (there is no public school bus). They drive traditional yellow buses and charge students per-ride to get to and from school, with pricing varying from one dollar to five, based on distance. Bus ridership is believed to cut into bike and walk numbers, based on participation numbers at RideWise's local bike/ped events dropping since the buses came into operation. Bus ridership does not appear to reduce car use, based on current data, but not much is known at this time.



SOUTH BOUND BROOK SCHOOL DISTRICT

Robert Morris School, located roughly in the center of South Bound Brook, is the only school in this Borough. The school district name is South Bound Brook Public Schools. In 2014-2015 school year, Robert Morris School includes 465 students range from Grade PK-8. For K-8 students, the arrival time is 8:26 am, and dismissal time at 3:00 pm and 12:38 pm for full-day session and half-day sessions respectively.⁴² There are 163 students eligible for free meal, and 55 students for reduced-price meal. In terms of race of students, 49% are Hispanic, 29% are white, 12% are black/African-American, and Asian/Pacific Islander and two or more races are 5% each.⁴³ This information is displayed in Tables 5 and 6.

Existing Policies

School Wellness Policy The wellness policy of Robert Morris School focuses on the nutrient standards for meals and other foods as well as physical activity. The standard follows the Healthy, Hunger Free Kids Act of 2010, which provide the nutrition standards for school lunch and breakfast program as well as provide fund to child nutrition program.⁴⁶ The goals of the wellness policy cover nutrition promotion, nutrition education, physical activity, and other school-based activities. The wellness policy has met most of the objectives by the division of food and nutrition under the department of food and nutrition.⁴⁵ However, there is no measurable goals for each sector and the school meal nutrition, calorie, and content information are not publicized to students and families.⁴⁵

The policy also includes goals for physical activity which include providing properly certified physical activity teaching staff, age-appropriate equipment during recess, and school staff encouraging students to participate in walking, playing games and/or using playground equipment during recess.

Table 5: Robert Morris School Profile, 2014-2015 School Year

Enrollment	Grade Levels	Arrival Time	Dismissal Time	Free and Reduced Lunch Eligible	Economically Disadvantaged Students	English Learners	Homeless
465	PK-8	K-8: 8:26 PK: 8:26-10:56	K-8: 3:00 pm on full day and 12:38 pm for half-day sessions PK: 12:26 – 2:56	47%	47%	7%	0%

Table 6: Robert Morris School Racial Demographics, 2017

Hispanic	White	Black/African American	Asian	Two or More Races
49%	29%	12%	5%	5%

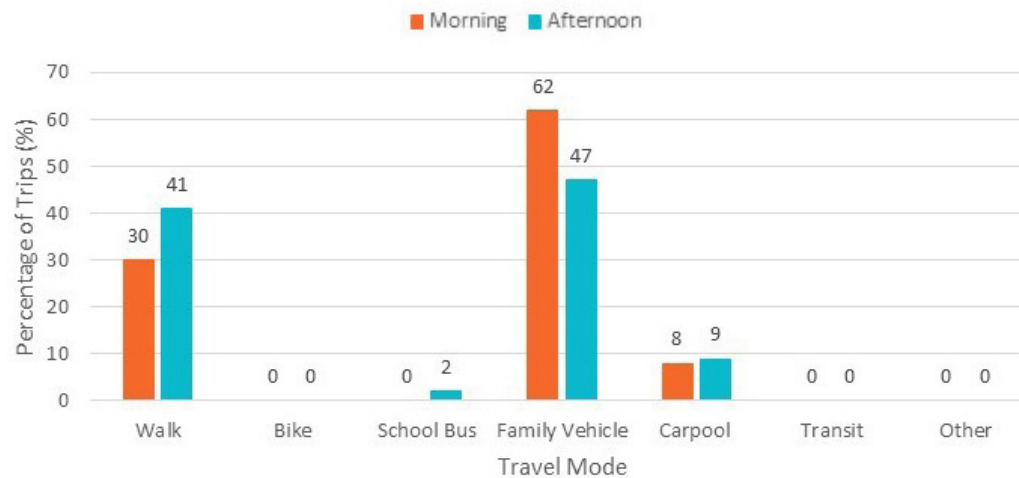
Classroom teachers are encouraged to include physical activity breaks during normal school hours and the school has special events like walkathons and activity tournaments. A designated Wellness Committee working with the principal provides annual school progress reports that list how goals are being met.⁴⁵

School Meals In terms of school meals, Pomptonian, the school food service, offers a breakfast program before school and lunch. Both of the programs are served at regular price, reduced price, and at no cost, while additional lunch snacks and beverages can be purchased separately. Students must select at least three of fruits, vegetables, grains, protein, and dairy among which no less than one selection must be a fruit or a vegetable component. Beyond school meals, fruits and non-fried vegetables also provided in snack bars.⁴⁵

Robert Morris School School Bicycling Policy The South Bound Brook School District includes the following statement about bicycle use in the Robert Morris School Student Handbook, “Bicycle riding to school is permitted for students with consent of their parents. When students reach school property, they are required to walk their bikes to the bike rack. Please make certain that the bike is chained and locked. At the end of the school day, bicycles must be walked off of school property. The school is not responsible for theft or damage. Scooters and skateboards are not permitted to be ridden to school.”⁴⁴

Robert Morris School School Arrival Policy The South Bound Brook School District includes the following statement about school arrival in the Robert Morris School Student Handbook, “Students must be in their classrooms by 8:30 a.m., or they will be considered late to school. Students should not arrive at their assigned entrances prior to 8:16 a.m. There is no supervision at school entrances before that time. Because of the number of students on school grounds in the morning before school, basketball, football, Frisbee, and other games which may create a safety hazard are not permitted.”⁴⁴

Figure 15: Robert Morris School Morning and Afternoon Travel Modes Comparison, January 2018



South Bound Brook School Travel Mode Tallies

Robert Morris School This school includes Kindergarten through 8th Grade. Figure 15 shows the results from the student arrival and departure travel tallies taken in January 2018. Based on the travel tallies, Robert Morris students are predominantly driven to and from school. The second-most popular travel mode is walking. More students are driven in the morning and more students walk in the afternoon. The weather conditions did not significantly deter students, as twenty-seven percent of students still walked in snowy conditions compared to thirty-six percent in sunny. A decent percentage (8% and 9%) of students carpool daily. There is notably no biking (0%) daily.

Working Groups and Partnerships



WORKING GROUP PARTICIPANTS

This program aims to engage local organizations and community groups who will support the SRTS program. Tables 7, 8, and 9 list the representatives that were part of the travel plan working group.

Table 7: Working Group Participants, Bound Brook			
Name	Title	Affiliation	Contact
Vito Bet	Chief of Police	Bound Brook Police Department	vbet@boundbrookpd.org
Abel Gomez	Borough Council	Borough of Bound Brook	agomez@boundbrook-nj.org
Hector Herrera	Borough Administrator	Borough of Bound Brook	hherrera@boundbrook-nj.org
Daniel Gallagher	Superintendent of Schools	Bound Brook School District	superintendent@bbrook.org
Beth Fischer	Asst Superintendent of Schools	Bound Brook School District	EFischer@bbrook.org

Table 8: Working Group Participants, South Bound Brook			
Name	Title	Affiliation	Contact
Richard Eickhorst	Council President	Borough of South Bound Brook	SBBREickhorst@optonline.net
Christina Fischer, RMC	Municipal Clerk	Borough of South Bound Brook	cfischer@southboundbrook.com
Chris Shoffner	Mayor	Borough of South Bound Brook	cshoffnet@southboundbrook.com
Jeff Titus	Chief of Police	Borough of South Bound Brook	jtitus@sbbpolice.org
Lorise Goeke, Ph.D.	Superintendent of Schools/ principal	South Bound Brook School District	goeke@rmschool.com
Vinnie Caravello	School Business Administrator	South Bound Brook School District	Caravello@rmschool.com

Table 9: Working Group Participants, Somerset County and Other Stakeholders			
Name	Title	Affiliation	Contact
Walter C. Lane, AICP/ PP	Director of Planning	Somerset County Planning Division	lane@co.somerset.nj.us
Saleena Marria, MBA	Corporate & Foundation Relations	RWJBarnabas Health, Healthier Somerset	Saleena.Marria@rwjbh.org
Sean Meehan	Project Manager	Alan M. Voorhees Transportation Center, Rutgers University	smeehan@ejb.rutgers.edu
Daniel Puntillo	Leadership Team/Action Team Chair	Big Dan's Bike Shop, Healthier Somerset	dpuntillo@optonline.net
Lisa Rothenburger	Somerset County 4H	NJHI- Bound Brook	Rothenburger@njaes.rutgers.edu
Maria Strada	Executive Director	Middle Earth	mstrada@middleearthnj.org
Leigh Ann Von Hagen	Senior Researcher	Alan M. Voorhees Transportation Center, Rutgers University	lavh@ejb.rutgers.edu
Elise Bremer-Nei, AICP/PP	Bicycle and Pedestrian Coordinator	New Jersey Department of Transportation Office of Bicycle and Pedestrian Programs	elise.bremer-nei@dot.nj.gov
Serena Collado	Leadership Team/Policy Action Team Chair	RWJBarnabas Health, Healthier Somerset	Serena.Collado@RWJBH.org
Heidi Cyr	4H/Middle Earth Coach	4/H Middle Earth	heidicyr@gmail.com
Donna Allison	Executive Director	Ridewise	donna@ridewise.org
Gerry Montague	Program Director	Ridewise	gerard@ridewise.org

EXISTING SAFE ROUTES TO SCHOOL EFFORTS

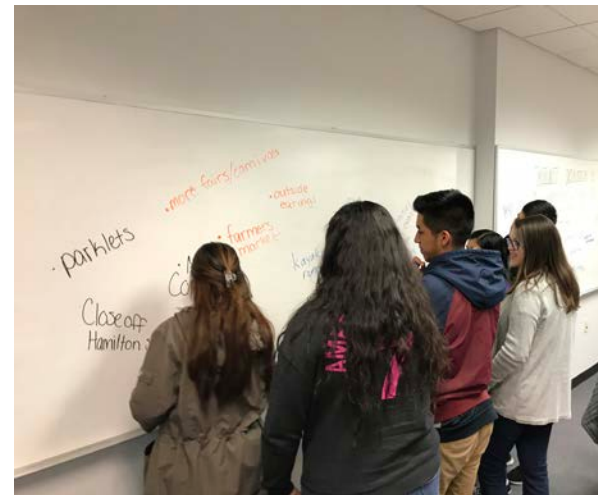
There are Safe Routes to School educational and encouragement programs in both the Bound Brook and South Bound Brook schools. In 2017, Bound Brook as a municipality and all of the elementary schools, Smalley School, Lafayette Elementary School and LaMonte/LaMonte Annex, received the silver designation for the NJ Safe Routes to School Recognition Program.⁴⁷ The Robert Morris School in South Bound Brook received “first step” designation through the Recognition Program. Municipalities and schools (public, private, or charter) are recognized for their commitment and support of the Safe Routes to School program by completing projects and programs that meet designation requirements. Certification is valid for three years.



Bound Brook Safe Routes to School Program

In Bound Brook, the program has been running for the past 5 years and involves students from LaMonte & LaMonte Annex, Lafayette, Smalley, and Community Middle School. The following are past and upcoming programs to encourage safe walking and bicycling:

- LaMonte, Smalley and Lafayette operate a monthly Walking School Bus on the first Thursday of September, October, April, May and June. Junior National Honor Society students at Community Middle School help escort younger students to schools.
- In the 2015-16 and 2016-17 school years, Lafayette School held a “Most Miles” contest every month to track how many miles students walked to and from school. Each classroom tracks number of miles for a combined classroom score which is tabulated and maintained on a scoreboard overseen by RideWise. The classroom with the most miles at the end of year receives a trophy that rotates between the winning classrooms and prizes.
- In 2016-2017 school year, Smalley School held a poster contest where students submitted artwork about safe walking and bicycling. Winners were selected by the school art department and RideWise.



Source: Ridewise, Inc.



Source: RideWise, Inc.

- The Safety Town pedestrian education program was taught to students attending the Middle Earth aftercare programs in all 4 elementary schools in Bound Brook. The program was offered in the spring and fall of 2017 and taught by RideWise staff.
- Each fall, RideWise staff teaches Community Middle School students pedestrian safety skills that includes a mile walk to Smalley School, which is the main site for aftercare programs.
- In May of 2018, RideWise and Middle Earth staff will teach safe cycling classes to students in aftercare. Lafayette School is allowing Middle Earth to store their bikes on site and has approved cycling on their school grounds.
- RideWise partners with the Bound Brook High School driver education program to teach pedestrian and cycling safety as part of the new NJ Motor Vehicle Commission license requirements.
- Future plans include organizing a bike train with Community Middle School students to ensure students learn bike safety, the importance of wearing a helmet, and how to properly lock bikes.

South Bound Brook Safe Routes to School Program

In South Bound Brook, Safe Routes to School programs are newer to the district. The Robert Morris School students have celebrated International Walk to School Day in October annually over the past several years. The once per year Walk to School Day event is very well attended and has support from the school superintendent and participation from the South Bound Brook police. The following are other past and upcoming programs to encourage safe walking and bicycling:

- The fall of 2017 was the first time the Safety Town pedestrian education program was taught to students in all grades at Robert Morris School. It is anticipated this program will be offered annually.
- There is interest in expanding the once per year Walk to School Day to more frequent events.
- There is interest in setting up a walking school bus.

NJ SRTS RECOGNITION PROGRAM & SUSTAINABLE JERSEY/SUSTAINABLE JERSEY FOR SCHOOLS

Sustainable Jersey is a certification program for both New Jersey municipalities and public schools that want to go green, conserve resources and take steps to create a sustainable community. By enrolling and certifying through the Sustainable Jersey program, schools and communities have access to tools, training, financial incentives and grants for support toward becoming more sustainable including reducing waste, cutting greenhouse gas emissions and improving environmental equity.

Table 10: Sustainable Jersey Points

Sustainable Jersey for Municipalities			
Action	Points	Bound Brook	South Bound Brook
Safe Routes to School	10	×	Resolution of support for SRTS programs and assist at 2 or more events
Bicycle and/or Pedestrian Audit	5	×	×
Adopt a Complete Streets Policy	10	Update policy to include health text	Adopt CS Policy
Institute Complete Streets	10-15	Adopt CS checklists	Adopt CS checklists
Anti-Idling Education	10	Targeted education & enforcement	Targeted education & enforcement
Sustainable Jersey for Schools			
School Travel Plan for Walking and Bicycling	10	×	×
Safe Routes to School District Policy	10	×	Adopt supportive policies for walk/bike
Pedestrian and Bicycle Safety Promotion Initiatives	10	×	Host 2 walk/bike ed. programs and active transportation best practices
Anti-idling Education	10	Pass a Res. & implement 2 programs	Pass a Res. & implement 2 programs

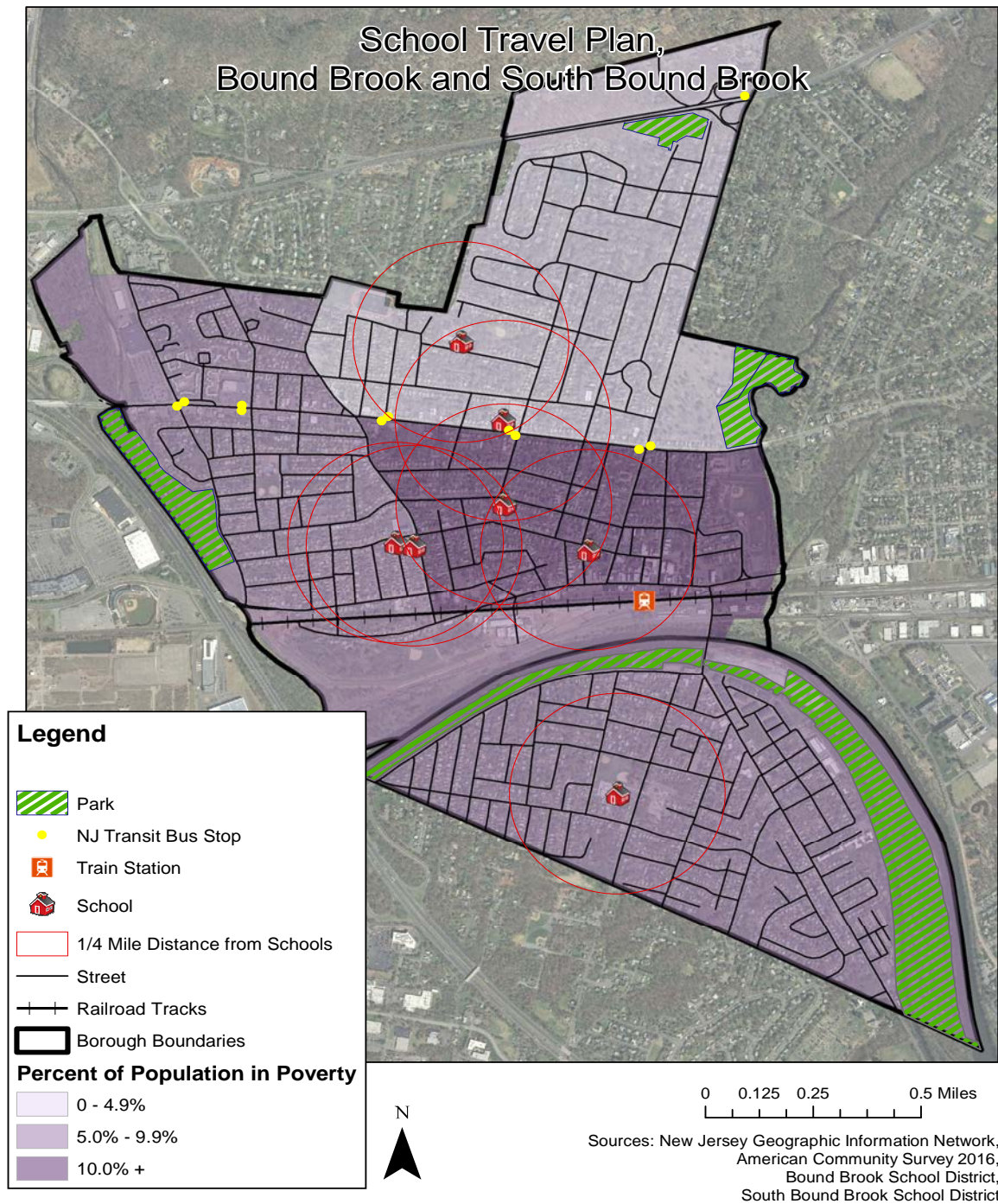
The NJ Safe Routes to School Recognition Program awards municipalities and schools for their commitment and support of the program, and there are many synergies between both the NJ SRTS Recognition Program and the Sustainable Jersey program, as points can be earned toward both programs. By completing this school travel plan, ten points are already earned toward the Sustainable Jersey for Schools program for all of the schools included in this school travel plan, and it can also count toward Gold level recognition for the SRTS program. Lafayette, LaMonte and Smalley Schools are already Silver level NJ SRTS Recognition Program winners and completing this school travel plan allows them to achieve Gold level status. Bound Brook Community School and Robert Morris School are both at the First Step level for the NJ SRTS Recognition Program, and by participating and completing this school travel plan, they have achieved some criteria to move up levels such as completing student arrival and departure tallies and walkability assessments.

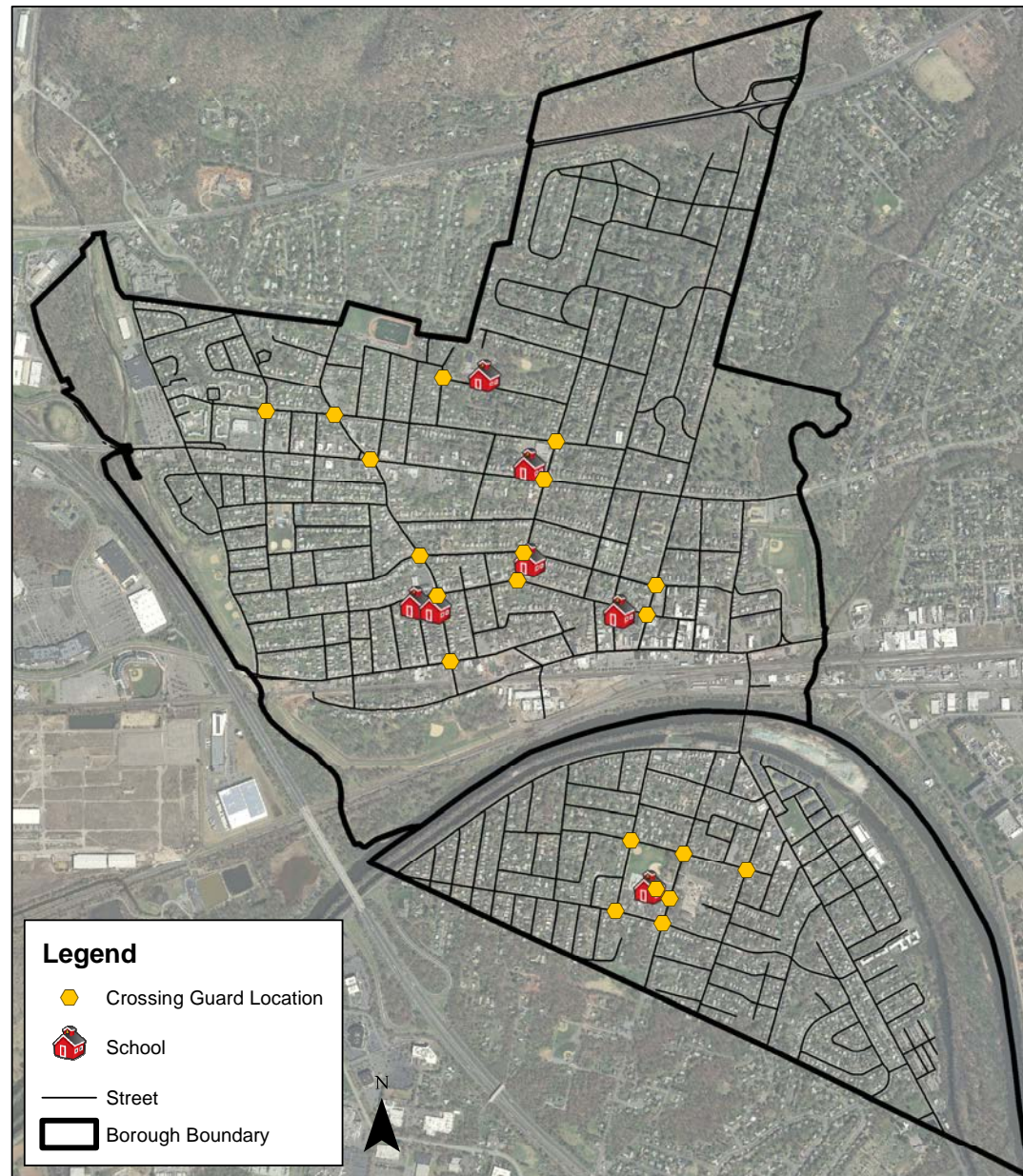
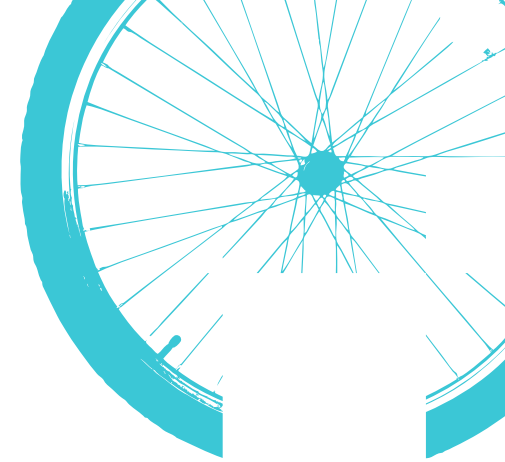
Currently, the borough of Bound Brook is enrolled in Sustainable Jersey, however is not yet certified at either the bronze or silver level. The Borough of South Bound Brook is not currently enrolled

in Sustainable Jersey. By completing this school travel plan, both the borough of Bound Brook and South Bound Brook qualify for the Pedestrian Audit action for five points towards Sustainable Jersey certification. Furthermore, the Borough of Bound Brook can move up to Gold level NJ SRTS Recognition Program status by completing this school travel plan. Since the Borough of Bound Brook is a Silver level NJ SRTS Recognition Program winner, they can easily receive ten points for the Safe Routes to School action for ten points from Sustainable Jersey. Lastly, this school travel plan could be the stepping-stone towards a Bicycle/ Pedestrian Plan by adding a vision statement, goals & objectives and adopting it into their existing Master Plan for both Bound Brook and South Bound Brook, which would earn them ten points toward Sustainable Jersey certification.

There is a great partnership between the Sustainable Jersey and the NJ SRTS Recognition Program since municipalities and schools can meet the requirements and earn points for both programs just by completing this school travel plan. For more information, visit <http://www.saferoutesnj.org/sustainable-jersey-and-sustainable-jersey-for-schools-actions>.

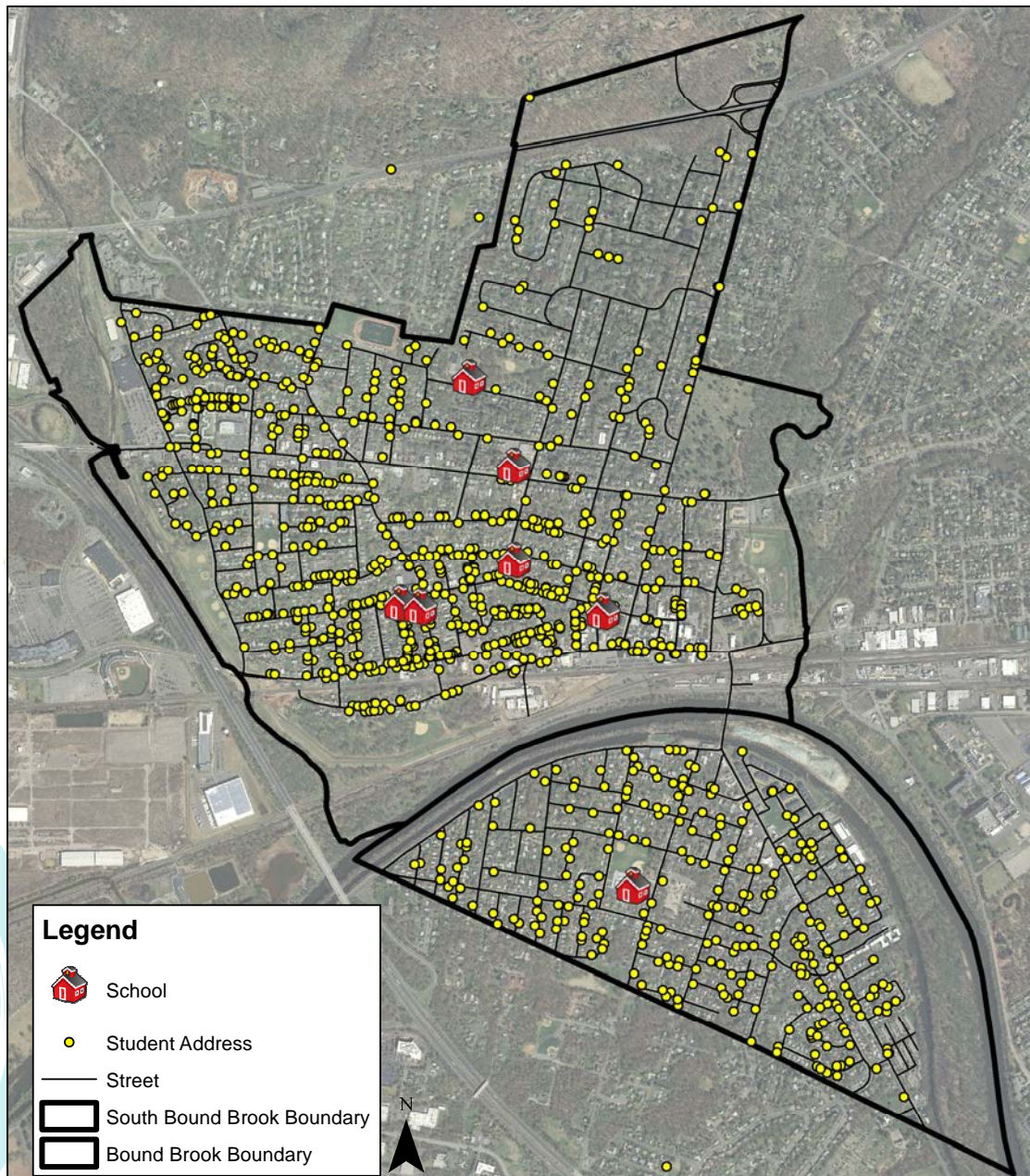
Existing Conditions





Bound Brook and
South Bound Brook,
Crossing Guard Locations

Sources: NJ Geographic Information Network,
Bound Brook School District,
Bound Brook Police Department,
South Bound Brook Police Department

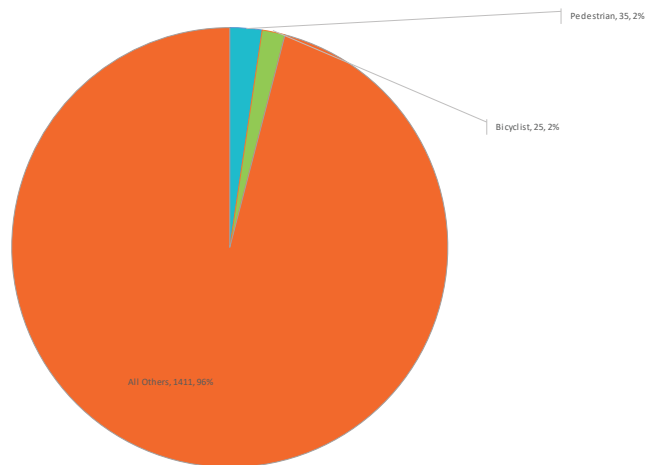


Bound Brook and South Bound Brook Student Addresses

CRASH ANALYSIS

In New Jersey, there are three primary data sources for crashes: (1) New Jersey Department of Transportation Raw Data⁴⁸, (2) NJDOT Safety Voyager⁴⁹, and (3) NJ Division of Highway Traffic Safety Crash Analysis Tool.⁵⁰ However, the data in Safety Voyager and the Crash Analysis Tool are not always complete. Often, not all crash records received from the police NJTR-1 crash investigation reports include location information which allow for them to be mapped.⁵¹ Therefore, the NJDOT Raw Data was used to provide the most complete number of crashes.

Figure 16: Total Crashes in Bound Brook, 2012-2016



Bound Brook Crash Analysis

According to NJDOT Crash Data (Raw Data files) for Somerset County, 1,471 motor vehicle crashes occurred between 2012-2016 in Bound Brook, shown in Figure 16. Among these crashes, 35 of the crashes were pedestrian and 25 were bicyclists. Of those crashes, there was one (1) pedestrian death, 33 pedestrian injuries, and one (1) that involved property damage, shown in Table 11. All 25 bicycle crashes included injuries to the cyclist.⁴⁸

In terms of number of crashes by year, pedestrian crashes are a growing trend, shown in Table 12. The most bicyclist crashes occurred in 2013, while the numbers of bicyclist crashes hover between 2 and 4 during the other years.⁴⁸

Table 11: Pedestrian and Bicyclist Crash Severity, Bound Brook

Severity	Pedestrian	Bicyclist
Fatality	1	0
Injury	33	25
Property Damage Only	1	0
Total	35	25

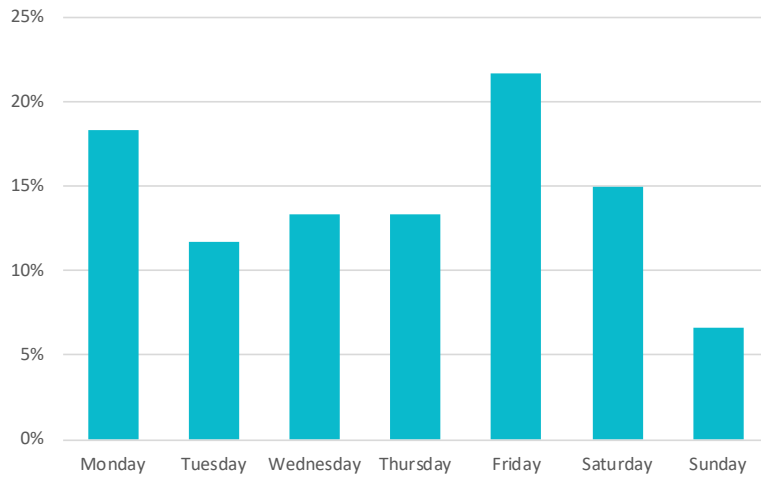
Table 12: Number of Pedestrian and Bicycle Crashes by Year, Bound Brook

	2012	2013	2014	2015	2016
Pedestrian	5	6	7	10	7
Bicyclist	4	11	4	2	4
Total	9	17	11	12	11



Intersection of Tea Street and Route 28 (Union Avenue), looking southbound from Shoprite. Picture provided by Ridewise, Inc.

Figure 17: Crashes by Day of Week in Bound Brook

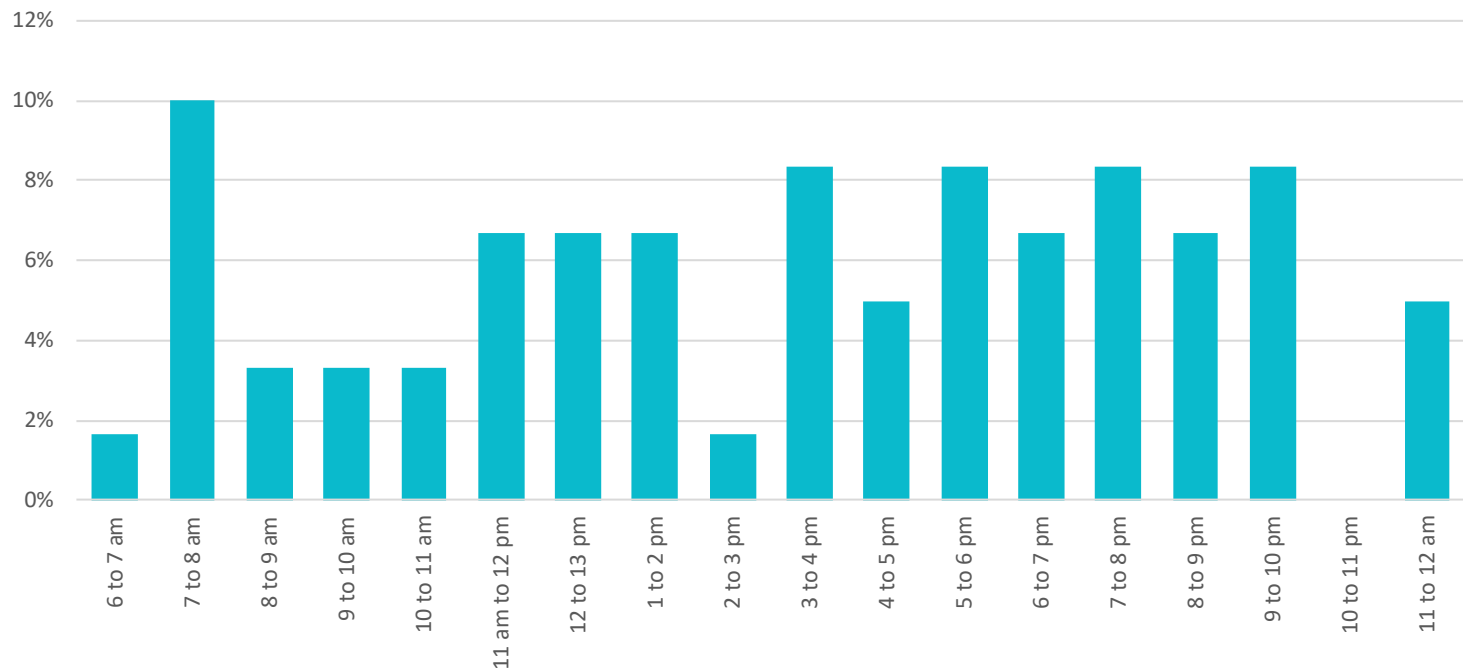


Of the pedestrian and bicycle crashes in this time period, Friday has the greatest possibility (21.7%, 13 crashes) for bicyclist and pedestrian crashes. Monday has the second most empirical possibility (18.3%, 11 crashes) of bike-pedestrian crashes. Among these 7 days, the least number of crashes happened on Sunday (6.7%, 4 crashes), shown in Figure 17.⁴⁸

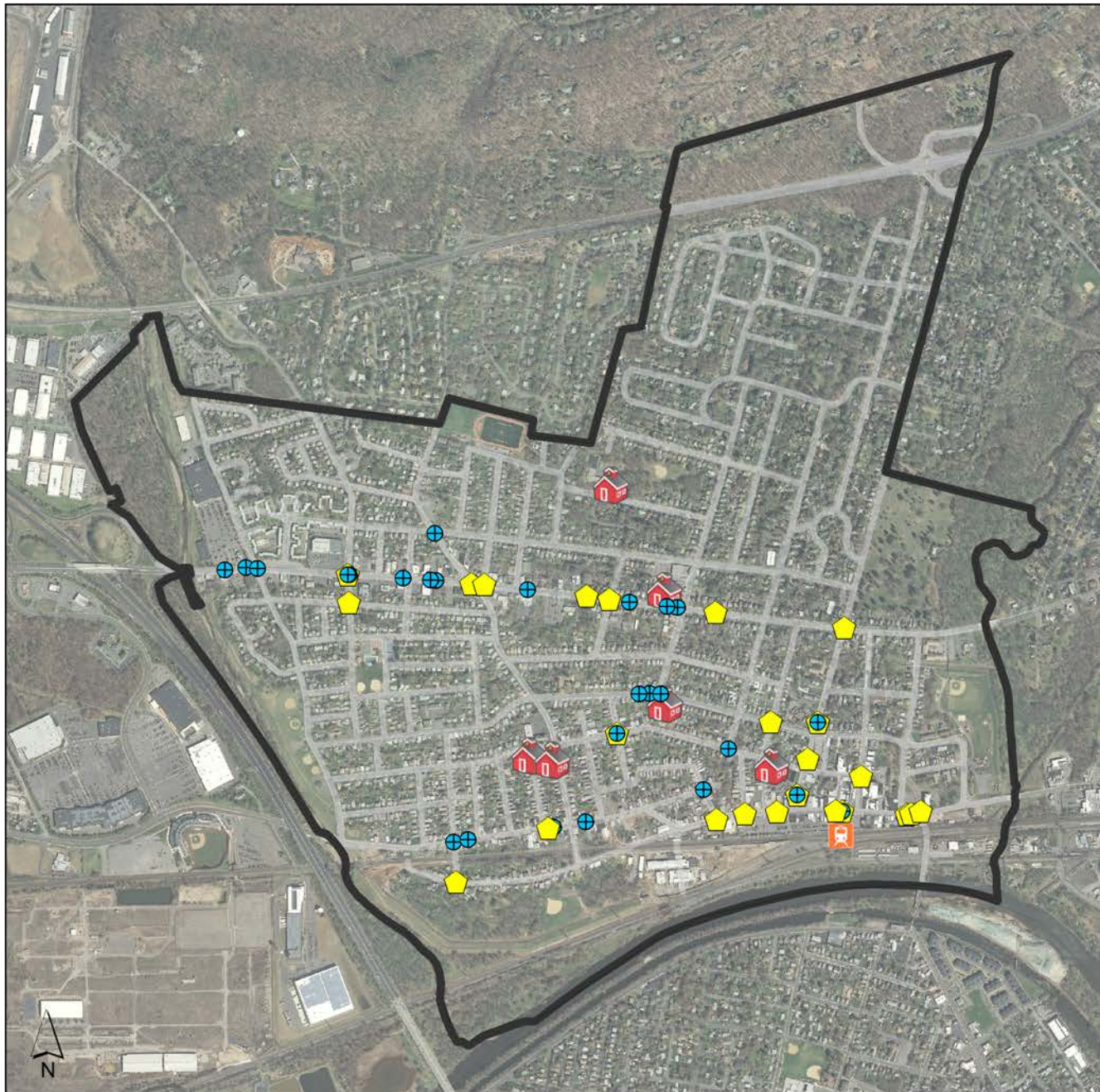
From the data, the time interval between 7 and 8 am has the most bicyclist and pedestrian crashes, while the least is from 10 to 11 pm, shown in Figure 18.⁴⁸

Based on the crash data from 2012 to 2016, 15 pedestrian crashes and 3 bicyclist crashes occurred on State Route 28, which is the road with the most crashes in Bound Brook. Three additional areas of concern for pedestrian and bicycle crashes include, 1) the intersection of Route 28 and Tea Street where 6 pedestrian crashes occurred during past five years; 2) The neighborhood of Lafayette Elementary School which includes two intersections, the three-way intersection of Winsor Street and the intersection of Fairview Ave and West 2nd Street where 5 pedestrian crashes and 1 bicycle crash occurred; and 3) the downtown area of Bound Brook, north to East High Street, south to East Main Street, west to Drake Street, and east to Bolmer Blvd. where 4 pedestrian crashes and 8 bicycle crashes occurred. All four of these locations are high-traffic areas for all modes of transportation.






Figure 18: Crashes by Time of Day in Bound Brook



Bound Brook Pedestrian and Bicyclist Crash Locations



Legend

-  Pedestrian Crash
-  Bicyclist Crash
-  School
-  Train Station
-  Bound Brook Boundary

0 0.125 0.25 0.5 Miles

Source: NJ State Department of Transportation, Safety Voyager

Figure 19: Total Crashes in South Bound Brook, 2012-2016

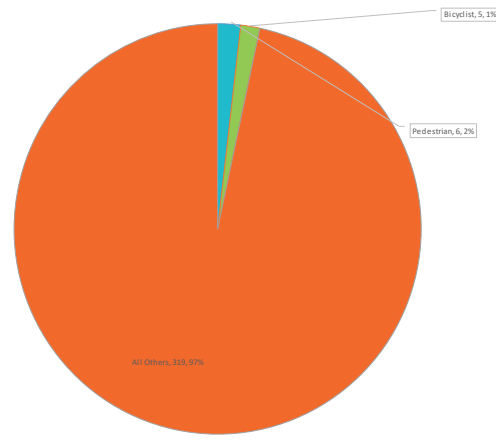


Table 13: Pedestrian and Bicyclist Crash Severity, South Bound Brook

Severity	Pedestrian	Bicyclist
Fatality	0	0
Injury	6	2
Property Damage Only	0	3
Total	6	5

Table 14: Number of Pedestrian and Bicycle Crashes by Year, South Bound Brook

	2012	2013	2014	2015	2016
Pedestrian	1	1	1	0	3
Bicyclist	0	1	1	1	2
Total	1	2	2	1	5

South Bound Brook Crash Analysis

According to NJDOT Crash Data (Raw Data files) for Somerset County, 330 crashes occurred in South Bound Brook between 2012 to 2016, shown in figure 19. Among these crashes, 6 involved pedestrians and 5 involved bicyclists. Regarding pedestrian crashes, all crashes involve injuries. For cyclist crashes, 2 involve injuries and 3 causes property damage only.⁴⁸

In terms of number of crashes by year, one pedestrian crashes occurred each year from 2012 to 2014 with no pedestrian crash records in 2015.⁴⁸ In 2016, three pedestrian crashes occurred, which is the most in one year in South Bound Brook.⁴⁸ Similarly, there are no bicyclist crash records in 2012, but one bicyclist crash occurred each year from 2013 to 2015.⁴⁸

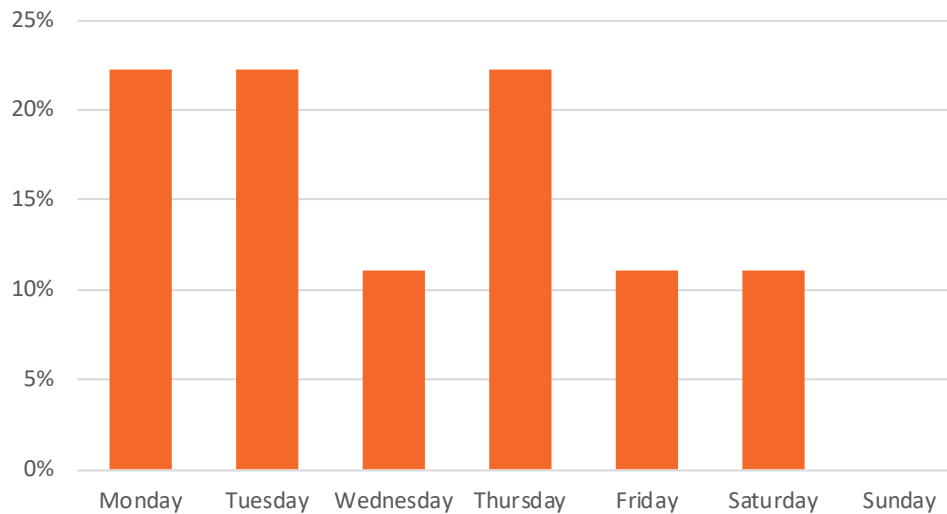


View down Elm Street from Main Street in South Bound Brook. Sidewalk stop on right side, no sidewalk on left side. Picture provided by Ridewise, Inc.



Abandoned, half demolished building next to the South Bound Brook Police Station, taken from Queens Bridge. Picture provided by Ridewise, Inc.

Figure 20: Crashes by Day of Week in South Bound Brook,



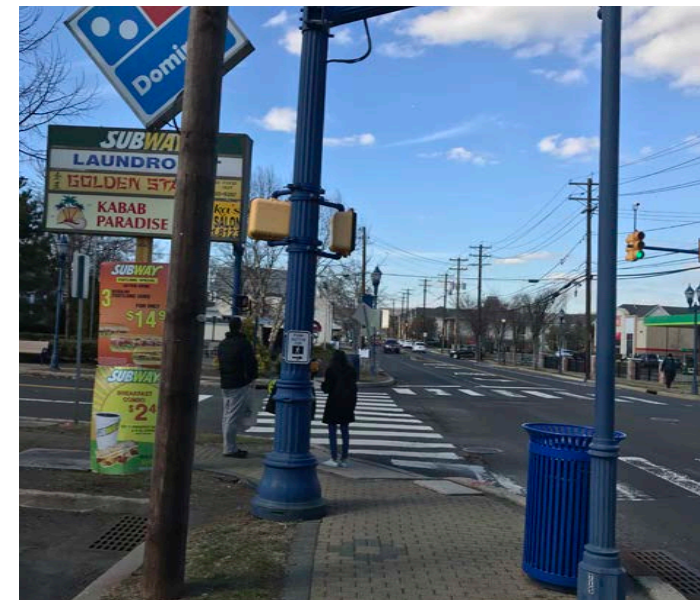
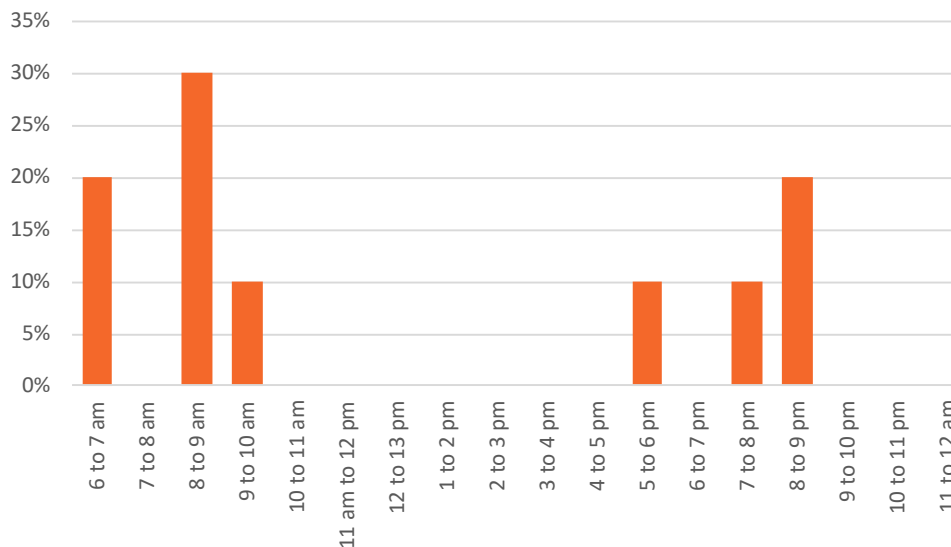
Due to the small numbers of crash record in South Bound Brook, there is no significant difference in number of crash by day of week. From the empirical data, two crashes occurred on Monday, Tuesday, and Thursday separately, one crash on Wednesday, Friday, and Saturday. There are no crash records for pedestrian and bicycle crashes on Sunday in South Bound Brook.

From the empirical data, the time interval between 8 and 9 am has the most bicyclist and pedestrian crashes, followed by 6 – 7 am and 8 – 9pm.

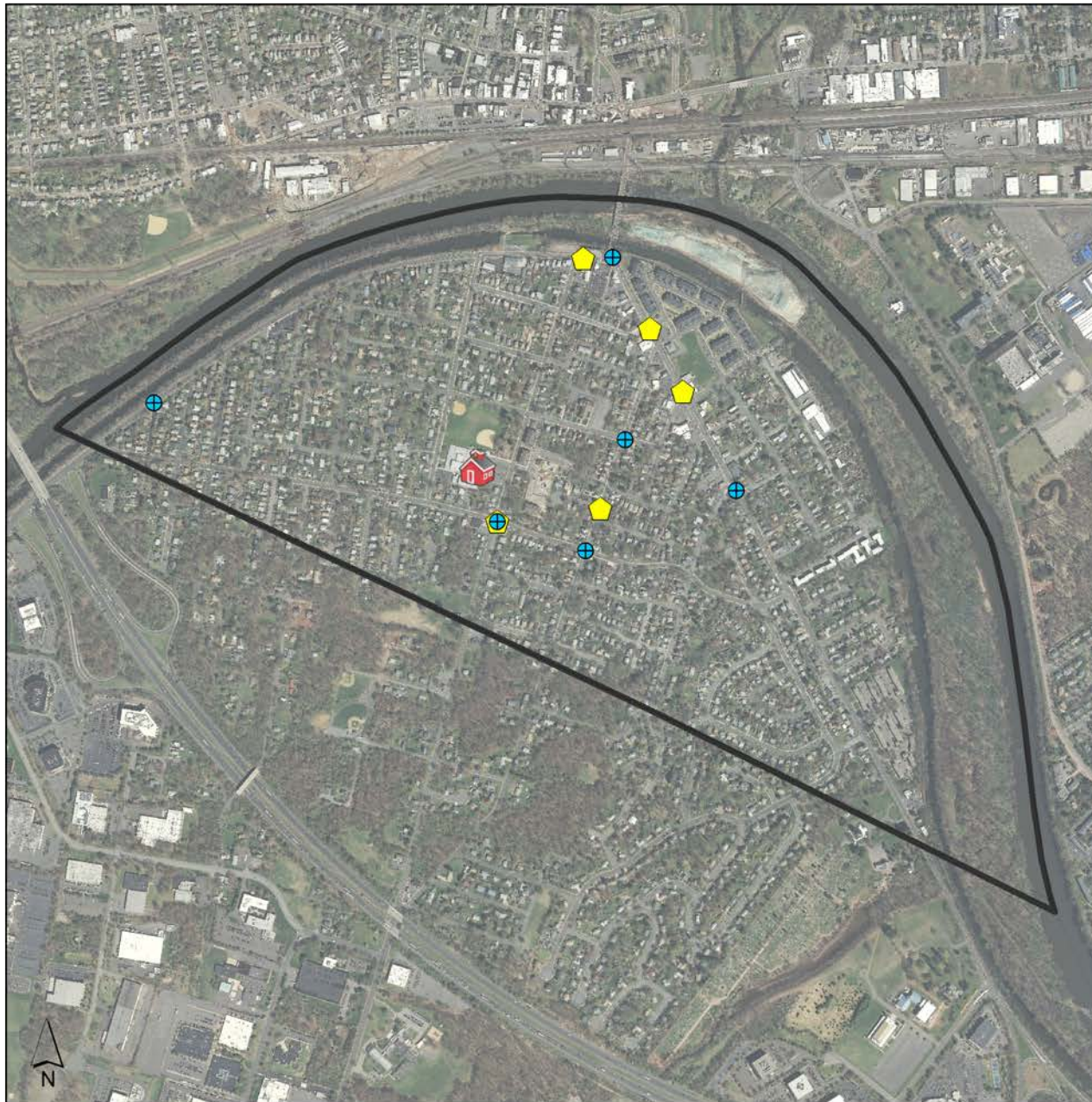
Due to the smaller size of South Bound Brook area and population, the number of pedestrian and bicyclist crashes are relatively smaller due to the smaller size of population. Nonetheless, we still identify County Route 527 (Main Street) as the top-priority area of pedestrian and bicyclist crashes in South Bound Brook. Between 2012 and 2016, 2 pedestrian crashes and bicyclists crashes occurred. In the year of 2016, 2 out of 5 pedestrian and bicyclist involved crashes happened on Main Street.

To control pedestrian and bicyclist involved crashes, we conducted walkability assessment to investigate current conditions of Main Street in South Bound Brook and provide recommendations to create a better walking and biking environment.

Figure 21: Crashes by Time of Day in South Bound Brook



South Bound Brook Pedestrian and Bicyclist Crash Locations



Legend

⊕ Pedestrian Crash

⬠ Bicyclist Crash

🏠 School

▭ South Bound Brook Boundary

0 0.1 0.2 0.4 Miles

Source: NJ State Department of Transportation, Safety Voyager