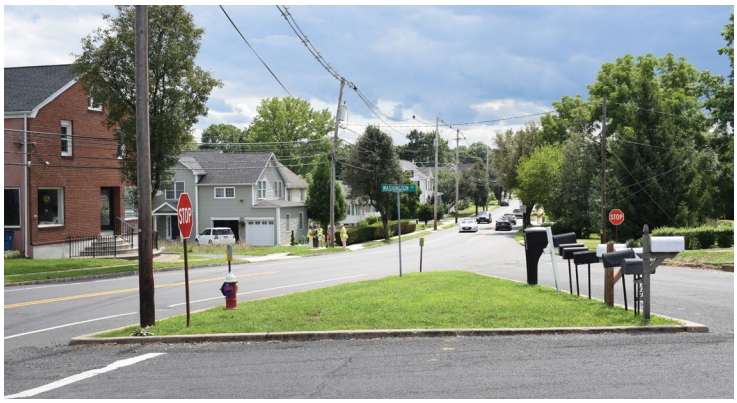


Main Street Walkable Community Workshop

Readington Township, Hunterdon County, NJ

2025

NJTPA
NORTH JERSEY TRANSPORTATION PLANNING AUTHORITY

RUTGERS
Edward J. Bloustein School of Planning and Public Policy

SUSTAINABLE JERSEY
• REGISTERED •
Working Toward Certification

About the Report

This report has been prepared as part of the North Jersey Transportation Planning Authority (NJTPA) Complete Streets Technical Assistance program with financing by the Federal Transit Administration and the Federal Highway Administration of the U.S. Department of Transportation. This document is disseminated under the sponsorship of the U.S. Department of Transportation in the interest of information exchange. The NJTPA is solely responsible for its contents.

The development of this report was led by staff at the Alan M. Voorhees Transportation Center (VTC) at Rutgers, The State University of New Jersey, in collaboration with Sustainable Jersey and the NJTPA.

The Alan M. Voorhees Transportation Center

The Alan M. Voorhees Transportation Center (VTC) is a national leader in the research and development of innovative transportation policy. Located within the Edward J. Bloustein School of Planning and Public Policy at Rutgers University, VTC has the full array of resources from a major research university on transportation issues of regional and national significance.

Alan M. Voorhees Transportation Center
Edward J. Bloustein School of Planning and Public Policy
Rutgers, The State University of New Jersey
33 Livingston Avenue, Fourth Floor
New Brunswick, New Jersey 08901

Sustainable Jersey

Sustainable Jersey (SJ) is a nonprofit organization that provides tools, training, and financial incentives to support communities as they pursue sustainability programs. By supporting community efforts to reduce waste, cut greenhouse gas emissions, and improve environmental equity, Sustainable Jersey is empowering communities to build a better world for future generations.

Sustainable Jersey
Sustainability Institute at the College of New Jersey
Forcina Hall, 3rd Floor
2000 Pennington Rd.
Ewing, NJ 08628

North Jersey Transportation Planning Authority

The North Jersey Transportation Planning Authority (NJTPA) is the federally authorized Metropolitan Planning Organization for 7 million people in the 13-county northern New Jersey region. Each year, the NJTPA oversees more than $3 billion in transportation improvement projects and provides a forum for interagency cooperation and public input. It also sponsors and conducts studies, assists county planning agencies, and monitors compliance with national air quality goals.

North Jersey Transportation Planning Authority
One Newark Center, 17th Floor
Newark, NJ 07102

Acknowledgments

The authors of this report would like to extend special thanks to the following Readington officials and other key stakeholders who made this project possible:

- Mayor Adam Mueller
- Township Committee Member Juergen Huelsebusch
- Director of Public Safety Jim Curry
- Chair, Planning Board; EC, GT Robert Becker
- Hunterdon County Public Works Director and County Engineer, Thomas Mathews
- Tara Shephard (goHunterdon TMA)
- Ryan Fisher (goHunterdon TMA)

The team would also like to thank all those who participated in the walk audit and were able to provide valuable insights into the study area. Rutgers graduate student Nikita Soni provided support in the preparation of this report.

Figure 1. Walk audit team at the Whitehouse Station Fire Company.

Table of Contents

Executive Summary

Complete Streets are streets designed for all users, all modes of transportation, and all ability levels. They balance the needs of drivers, pedestrians, bicyclists, transit riders, emergency responders, and goods movement based on local context.

- State of New Jersey Complete Streets Design Guide

Readington Township, New Jersey, participated in the 2024–2025 North Jersey Transportation Planning Authority (NJTPA) Complete Streets Technical Assistance (CSTA) Program. This report identifies several recommendations to promote walking and bicycling as a means of travel and improve the pedestrian experience along a section of Main Street (County Route 523) in the White House Station neighborhood.

This report calls for: providing and maintaining high-quality pedestrian and bicycle infrastructure; creating a consistent streetscape design; adding lighting and pedestrian amenities; and addressing deficiencies in signage and striping.

The recommendations in this report were developed through a Walkable Community Workshop that was held on August 12, 2024, which was a collaborative effort with municipal employees and Township stakeholders.

Readington Township covers more than 48 square miles, making it the largest township in the county. It is loosely settled, with a mixture of suburban developments and rural open space. The White House Station neighborhood is a village center at the northern end of the Township, centered on Main Street and the NJ TRANSIT White House Station (Figure 2). The close destinations and small town feel make it suitable for walking and bicycling. However, the same roadway is also a primary connection to US Route 22, which means it sees moderate traffic volumes that negatively impact the safety and comfort of non-motorists.

The lessons learned by all participants during the workshop can be applied to other roadways in Readington. The field audit form and a list of potential funding resources can be found in this report's appendices. These resources can be used to conduct other walk audits within the Township.

Figure 2. Main Street.

Background

The NJTPA created the CSTA Program in 2018 to assist municipalities in advancing or implementing Complete Streets. This report is part of the fourth round of the CSTA Program, in which five municipalities were selected to receive technical assistance. Municipalities were chosen for the program through a competitive application process based on the following criteria: the need for technical assistance, commitment to project implementation, opportunity for public engagement, and the strength of their respective municipal teams. In addition, projects at locations with high crash rates and projects with the potential to involve and benefit traditionally underserved populations were given additional consideration.

Readington requested a Walkable Community Workshop on Main Street, a County roadway (County Route 523) (Figure 3). Readington is home to various unincorporated communities, many of which grew alongside the railroad or a river. Whitehouse Station is the largest unincorporated community and census-designated place, with a population of 2,089. Centered around NJ TRANSIT's White House Station, the community is home to a number of small businesses along the walkable Main Street. However, the same corridor is also a primary connection to US Route 22, which means it also sees moderate traffic volumes, impacting the safety and comfort of non-motorists.

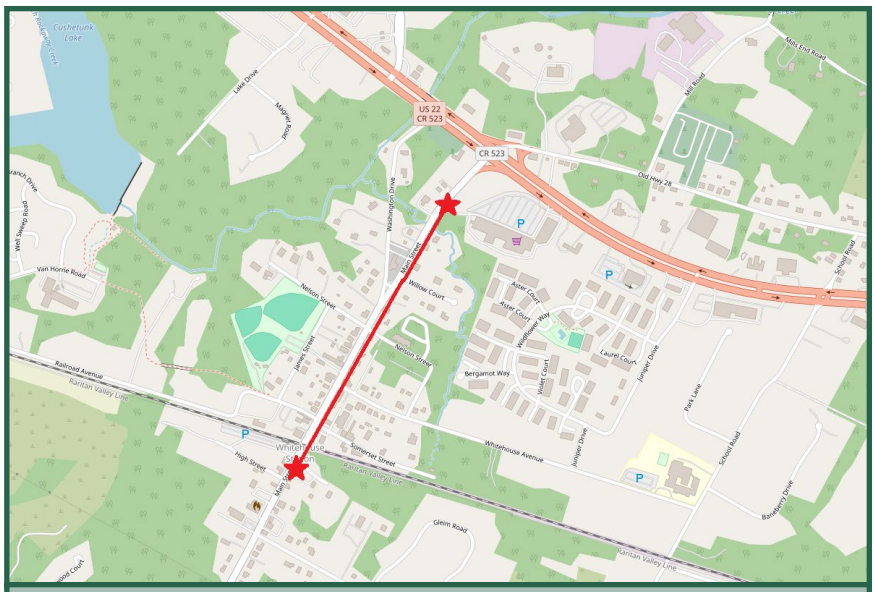


Figure 3. Study corridor map.

Prior to conducting the workshop, the CSTA project team met with Readington officials to discuss the study area and gain a better understanding of the corridor and the need for a walking audit. According to municipal officials, new residential developments have increased foot traffic, which has resulted in safety concerns, especially for those walking and bicycling. Readington also wants to make it easier for residents to access the businesses, train station, and municipal services located on Main Street without having to drive. Readington officials also noted the need for pedestrian and bicycle improvements approaching and across US 22. However, because the highway is under the New Jersey Department of Transportation (NJDOT) jurisdiction and faces different design challenges than the rest of the corridor, this intersection was excluded from the study area.

Municipal employees and stakeholders, including area residents, participated in a Walkable Community Workshop on August 12, 2024. Participants learned about the diverse benefits of Complete Streets and how improvements could be applied in their community. The workshop included an hour-long classroom-style training to ensure all participants were familiar with Complete Streets and best practices for bicycle and pedestrian design. The participants then walked the length of the study corridor with the project team, making note of existing conditions, observing driver and pedestrian behavior, and talking about future needs. As shown in Figure 3, the study corridor extended along Main Street, between the entrance to the Whitehouse Mall shopping plaza and Bank Street.

What is a Complete & Green Street?

Complete & Green Streets are part of a movement where municipalities, counties, and states adopt policies that require road engineering and design projects to consider the mobility needs of everyone (Figure 4). Everyone includes all roadway users and all travel modes—pedestrians, cyclists, transit users, freight, and travelers of all ages and abilities.

Section 11206 of the Bipartisan Infrastructure Law (BIL), also known as the Infrastructure Investment and Jobs Act (IIJA) of 2021, defines Complete Streets standards or policies as those which "ensure the safe and adequate accommodation of all users of the transportation system, including pedestrians, bicyclists, public transportation users, children, older individuals, individuals with disabilities, motorists, and freight vehicles."

Complete Streets should tailor the road to the specific needs of the surrounding environment. A school zone, for instance, may require reduced speed limits, narrower travel lanes, and wider sidewalks to achieve a safer setting for students. Meanwhile, streets along transit routes should accommodate the needs of commuters with benches, shelters, lighting, and signs (Figure 4).

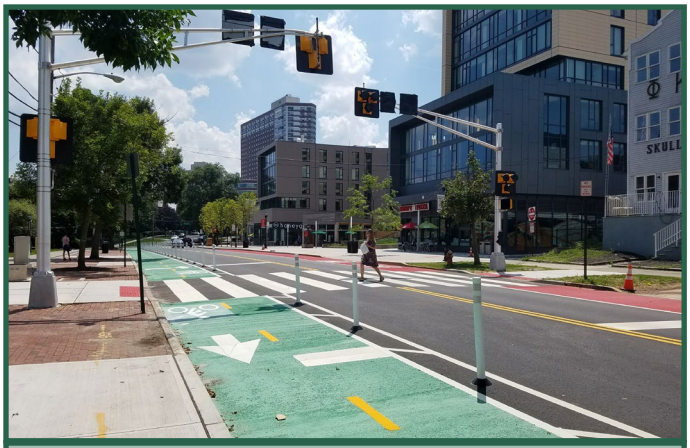


Figure 4. This Complete Street in New Brunswick, NJ, features a bicycle path, bus lane, and enhanced pedestrian crossing.

Regardless of the context, Complete & Green Streets should be designed to improve safety for pedestrians and bicyclists who are the most vulnerable road users. Reduced speed limits, raised medians, and other design elements can help create a safer environment for older adults, children, and people with disabilities. To put traffic speeds into perspective, a 10 mph reduction in vehicle speed dramatically decreases the chance of pedestrian fatalities in a collision. The U.S. Department of Transportation (USDOT) cites collisions in which pedestrians are struck by a vehicle traveling 40 mph as being fatal 85 percent of the time. Comparatively, at 30 mph, pedestrian fatality rates drop to 45 percent, and at 20 mph they are down to five percent (Figure 5 and Figure 6). Complete & Green Streets recognize that all transportation network users, whether traveling by car, bus, train, or taxi, become pedestrians at some point during their journey.

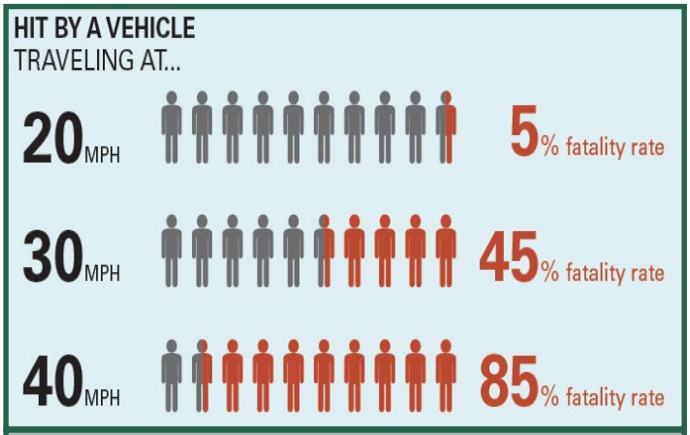


Figure 5. Graphic showing increased fatality rate as vehicle speeds increase. (USDOT)

Complete Streets is also an implementation strategy of the Safe System Approach, adopted as the guiding principle behind the USDOT National Roadway Safety Strategy, which holds that deaths and serious injuries due to roadway crashes are unacceptable. The Safe System Approach refocuses transportation system design and operation on anticipating human errors and reducing impact forces to minimize crash severity and save lives. Through this approach, transportation agencies implement proactive, redundant systems of safety to prevent crash fatalities and serious injuries. Complete Streets addresses two of the five elements of a Safe System (Safe Roads and Safe Speeds) and advances the proactive implementation of safety infrastructure.

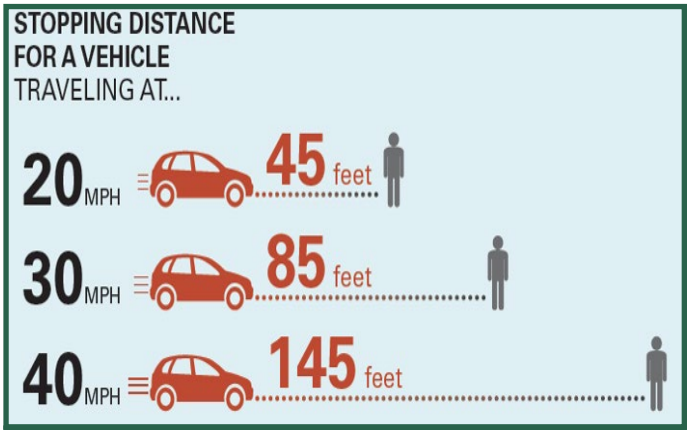


Figure 6. Graphic showing increased stopping distance as vehicle speeds increase. (USDOT)

Benefits of Complete Streets

While the primary benefit of Complete & Green Streets is improved safety for all roadway users, there are other positive outcomes. Complete streets create better places to live, work, and do business.

Public Health

Complete Streets make it possible for people to routinely choose walking, bicycling, and transit to access community destinations such as supermarkets, medical services, and entertainment destinations, leading to greater physical activity and social connectivity. Improving walkability, bikeability, and transit access helps solve urgent public health problems by improving safety and sociability and by reducing air pollution.

Green Streets

Green Streets use green infrastructure practices installed within the public right-of-way to manage stormwater while preserving the primary function of a street as a conduit for vehicles, pedestrians, bicyclists, and transit riders (Figure 7). Green Streets and Complete Streets can complement each other by creating an inviting and comfortable walking and bicycling environment by incorporating green infrastructure elements, such as street trees and rain gardens that provide shade and remove pollutants from the air, while minimizing flooding along streets and sidewalks that interferes with and discourages walking and bicycling.

Figure 7. Green infrastructure used to narrow the roadway and provide a shorter crossing distance for pedestrians.

Economic Vitality

Improving streetscapes can help to strengthen or revitalize business districts. Complete Streets generate more foot traffic when they create great places where people want to be, which can encourage both residents and visitors to spend more money at local shops and restaurants. For example, pedestrianizing Division Street in Somerville, New Jersey attracted new businesses and helped to revitalize a struggling business corridor (Figure 8). The economic benefits also extend to individuals by lowering costs related to car ownership. By walking, biking, and taking transit for more trips, households save money on driving expenses like gasoline, parking, and maintenance, and can choose to own fewer vehicles – or no vehicles at all.

Figure 8. Division Street in Somerville was converted into a popular pedestrian plaza.

Transportation Equity

Fair and equitable distribution of transportation investments is a fundamental principle of Complete Streets. All users of the transportation system should benefit from our shared streets regardless of income, ability, or other factors. For those whose transportation choices are limited by circumstance or location, pedestrian, bicycle, and transit access to essential services and community destinations such as hospitals, medical offices, senior centers, schools, employment centers, bus routes, and transit stops can be life-changing.

Complete Streets in Readington and New Jersey

New Jersey is a leader in the Complete Streets movement. In 2009, NJDOT was among the first state DOTs in the nation to adopt an internal complete streets policy. Since 2009, NJDOT has funded seven Complete Streets Summits and over a dozen local, regional, and statewide in-person and online educational workshops intended to disseminate the latest information about complete streets to planners, engineers, elected officials, and advocates. In 2017, NJDOT released the New Jersey Complete Streets Design Guide to inform New Jersey communities on how to implement Complete Streets projects. In 2019 (with updates in 2020), NJDOT released the Complete & Green Streets for All: Model Complete Streets Policy and Guide to serve as a resource for local best practices in policy language. One of the positive outcomes of these efforts is that communities of all sizes throughout the state have joined NJDOT in adopting Complete Streets policies. Of New Jersey's 21 counties, eight have adopted Complete Streets policies. Additionally, 182 municipalities have implemented their own policies (Figure 9). In November 2024, NJDOT updated its internal policy and checklists[1].

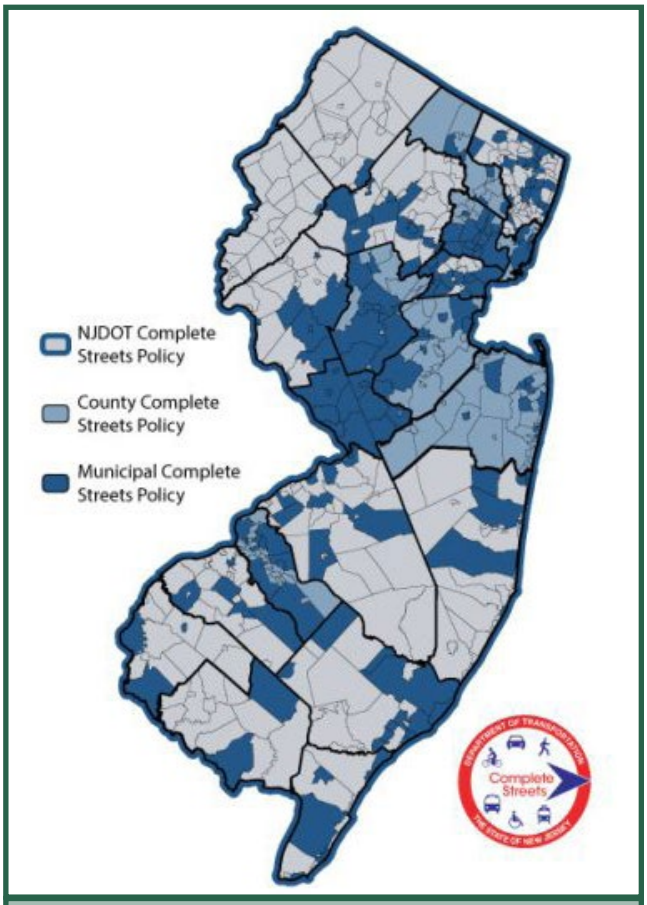


Figure 9. Complete Streets Policies in New Jersey, as of April 15, 2025. Visit https://njbikeped.org/nj-complete-streets-policy-compilation/ for a constantly updated list of policies.

Readington Township adopted a Complete Streets resolution on September 19, 2023, using language from the NJDOT Model Complete and Green Streets Policy. Hunterdon County has not adopted a policy.

Project Location and Assessment of Need

According to the 2020 US Census, Readington is home to approximately 16,128 residents within an area of 47.6 square miles. The median age is 50.2, and the estimated median household income is $141,802. The median home value is $507,800, which is more than the state median. The number of bicycle commuters in Readington has stayed the same at zero percent from 2015 to 2020, although that data is affected by the COVID-19 pandemic and does not include non-commute trips. Seventy-six percent of residents drive alone to work, while 0.4 percent walk to work. The population in Readington is majority white (81 percent). About 4.7 percent of the population aged five years and over speak Spanish at home, which is lower than the state average

Figure 10. Large trucks on Main Street.

Main Street (County Route 523) functions as both a walkable "downtown" and as a major connector to US Route 22 and onward to Interstate 78. During the audit, the County engineer noted that trucks heading to a distribution center in Flemington will exit Route 78 and use Main Street to reach the center (Figure 10).

1. https://njbikeped.org/complete-green-streets-for-all-model-policy-guide/ and https://www.nj.gov/transportation/eng/completestreets/resources.shtm

Whitehouse Elementary School is located a half mile east of Main Street and a number of athletic fields are located just to the west. As such, children and families cross Main Street when traveling between the two. Located on Route 22, and accessible from Main Street, is the Whitehouse Mall, a popular retail plaza (Figure 11). The plaza hosts a supermarket, Starbucks, and a variety of small businesses, all of which attract pedestrian and vehicular traffic. The neighborhood has also seen recent housing developments, generating more pedestrian and vehicular traffic, with additional units planned for the future.

The NJ TRANSIT station had an average of 53 daily boardings in the first quarter of 2025, a decrease from 83 at the same time in 2019. The public library is located in the former station building, which adds additional traffic to the property. Local police records show that crashes along the corridor increased from 9 crashes in 2022 to 15 in 2023.

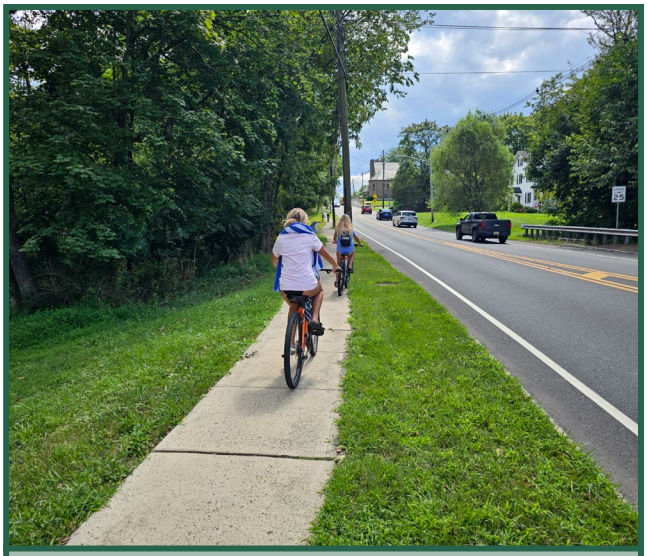


Figure 11. Teenagers bicycling home after stopping by the Whitehouse Mall.

Due to these concerns, Readington Township requested that the study team review and make recommendations for a half-mile section of Main Street.

Connection to Local Safety Action Plan

Efforts to improve the safety and comfort of people walking and bicycling in White House Station are consistent with the recently drafted Hunterdon County Local Safety Action Plan (LSAP), which identifies and prioritizes road safety improvements on county and local roads. The plan establishes a comprehensive framework for Hunterdon County to achieve the goal of Zero Deaths and Serious Injuries on County and Municipal Roads by 2050 based on the USDOT-endorsed Safe System Approach. Crashes involving pedestrians and bicyclists are one of the four emphasis areas selected by the plan's Local Implementation Committee. Emphasis areas were selected based on data, local expertise, and public input to identify Hunterdon County's foremost safety challenges.

The recommendations presented in this report are consistent with the draft Hunterdon County LSAP. Among the safety strategies included in the draft LSAP, the following are relevant to the Complete Streets Technical Assistance Program study:

- Install roadway treatments or signs to reduce or enforce the speed limit.
- Improve roadway infrastructure to increase safety for active transportation, transit, and other vulnerable road users.
- Improve intersection geometry (road alignment and sight distance), signalization, and pavement markings.
- Improve the safety of active transportation, transit, and other vulnerable road users through education, outreach, enforcement, and implementation of programs and policies.
- Implement Complete Streets policies and projects.

In addition, the draft LSAP identified Main Street between Davis Street and Route 22 (overlapping the Walkable Community Workshop location) as a priority location and developed short-term and long-term recommendations for this corridor.

Short-term recommendations:

- Install 6-inch edgelines
- Install rumble strips on centerline and/or edgelines
- Install dynamic speed feedback sign
- Install/upgrade high-visibility crosswalks

Long-term recommendations:

- Install rectangular rapid flashing beacon for midblock crossing near Washington Drive where sidewalk does not continue on Main Street
- Continue sidewalk into Kings Market plaza from Main Street
- Conduct a Complete Street Corridor Study

Traffic Volumes, Speed, and Crash History

Main Street (County Route 523) is an Urban Principal Arterial with a speed limit of 25 mph, which increases to 35 mph just south of the study area. NJDOT has recorded traffic counts twice for Main Street within the study area. In late October 2018, NJDOT observed an annual average daily traffic (AADT) volume of 12,549 on Main Street, just north of Whitehouse Avenue. Data collected at that same location in June 2015 found an AADT of 13,219. A County traffic count conducted at Main Street and Washington Drive in May 2019 found an AADT of 13,413. During that count, an average of 82 trucks (vehicle classes 10-16) were seen per day.

goHunterdon, the Transportation Management Association serving Hunterdon County, assisted the project team by providing vehicular speed counts, collected by a radar unit placed at 266 Main Street, between Kline Boulevard and Bank Street. That observation, which was undertaken between May 1 and May 14, 2023, found an average speed of 28 mph and an 85th percentile speed of 33 mph. The 85th percentile speed is the speed at which the majority of drivers (85 percent) travel at, or below, on a road segment. If the 85th percentile speed is appreciably greater than the posted speed limit, and the roadway context does not support setting a higher speed limit (as in this case), then traffic calming measures and additional traffic enforcement may be warranted.

The 2019 County traffic count observed higher speeds. They found an average speed of 36 mph, with an 85th percentile speed of 41 mph. This indicates that speeding is a concern along the corridor.

According to NJDOT crash data posted on their crash analysis website, Safety Voyager, over the six years from 2018–2023, there has been one reported crash involving a pedestrian and none involving bicyclists along the study corridor (Table 1).

Table 1. Pedestrian and bicycle crashes in study area, 2018-2023.

Location	Date	Time	Crash Type	Ped./Cyclist Age	Injury Severity	At Intersection	Lighting Condition
Main Street and Bank Street	6/22/2019	4:39 pm	Pedestrian	31	Moderate Injury	Yes	Daylight

Source - Safety Voyager

Workshop Methodology

Prior to conducting the workshop, the CSTA project team met with Readington officials to discuss the study corridor and gain a better understanding of the roadway, its location, use, and appropriateness for a walk audit. Participants in the Walkable Community Workshop held on August 12, 2024, included residents, Township staff, and staff of the goHunterdon Transportation Management Association.

The workshop included a one-hour presentation on the fundamentals of Complete Streets and best practices concerning pedestrian and bicycle design to ensure that all attendees had a common understanding of Complete Streets and the relationship between road design and behavior. It included instruction on ways to better support walking and bicycling and insight into the causes of vehicular speeding. Additionally, the presentation covered traffic engineering techniques to better accommodate bicyclists and pedestrians and proven measures to reduce speeding and improve overall safety along the corridor.

Following the presentation, the project team provided participants with a walk audit form so that they could take notes during the audit. The project team and participants then split up into two groups, each walking the entire length of the corridor (Figures 12–15). The audit walk consisted of discussing issues, writing observations, and identifying the existing conditions observed by participants familiar with the area. The project team and participants then conducted a post-audit debrief meeting to review the most important findings and identify potential recommendations for improvements. Following the workshop, the project team developed a series of recommendations for the corridor.

Figure 12. Team walking along Main Street.

Figure 13. Team walking along Main Street.

Figure 14. Team observing roadway conditions.

Figure 15. Team observing sidewalk conditions.

Workshop and Demonstration Findings

This section highlights corridor-wide commonalities of the study area, including sidewalks, intersections, safety, and comfort, which were observed during the walking audit portion of the walkable community workshop. This is followed by a detailed description of conditions along the route.

Corridor Summary

Sidewalks

Sidewalks are generally present on both sides of Main Street between Bank Street and Washington Drive, with a small gap in front of 153 Main Street (Figure 16). At Washington Drive, the sidewalk on the west side of the roadway ends just north of the intersection (Figure 17). The sidewalk on the east side continues north to the Whitehouse Mall driveway. Workshop attendees noted that plans are in place to extend the sidewalk into the center.

Figure 16. Missing sidewalk in front of 153 Main Street.

Figure 17. Missing sidewalk on west side of roadway north of Washington Drive.

The width of the sidewalk changes frequently throughout the study corridor. While exact measurements were not taken, some segments appear to be narrower than called for in current design guidelines. In one particularly narrow segment, overgrown vegetation further narrowed the space available to pedestrians (Figure 18). According to the Public Right-of-Way Accessibility Guidelines (PROWAG), the minimum sidewalk width is 48 inches (four feet) for a continuous clear path of travel, excluding the width of any curb. Sidewalks should be constructed as wide as necessary to accommodate pedestrian demand.

The sidewalk also varies in placement. For some sections, it is directly adjacent to the roadway, while in others it is separated by a small planting strip. Sidewalk material also varies. While most of the sidewalk is concrete, there are two sections that are brick.

Sidewalk conditions vary. In some sections, sidewalks have been lifted by trees (Figure 19). In other sections, weeds or other vegetation has created an uneven transition between concrete sections (Figure 20). While brick is an attractive material, it can become uneven if not maintained properly.

Figure 18. Narrow sidewalk.

Figure 19. Sidewalk broken by tree roots.

Figure 20. Sidewalk broken by tree roots.

Intersections and Crosswalks

There are six intersections in the study corridor and one railroad crossing. Apart from the railroad, which is controlled by gates, Main Street has the right of way (Figure 21). Traffic on Main Street does not have to stop for 1.9 miles between Route 22 to the north and Dreahook Road to the south. Although drivers are legally required to stop for pedestrians at crosswalks, the lack of signals or stop control can lead to decreased compliance.

High-visibility crosswalks are marked across Main Street at Nelson Street, Whitehouse Avenue and Bank Street (Figure 22). Google Street View shows that the County has done a good job of maintaining the crosswalk striping over the years. Although the sidewalk on the west side ends at Washington Drive, a marked crosswalk is not provided at this location. A curve in the road, a change in elevation, and a retaining wall limit visibility at this location, increasing the risk for pedestrian crossings (Figure 23).

Most curb ramps along the corridor appear to not be ADA compliant, lacking proper sloping and truncated domes. Maintenance issues have degraded the accessibility of some of the ramps (Figures 24 and 25).

Figure 21. Traffic stopped for commuter train.

Figure 22. The Whitehouse Avenue crosswalk has high visibility striping and warning signage, but no curb ramps.

Figure 23. Washington Drive intersection.

Figure 24. Missing ramp.

Figure 25. Non-compliant ramp.

North of the train station, street parking is allowed on the east side of the roadway. South of the train station, street parking is allowed on the west side. In some cases, signage related to the safe parking distance from the intersection is missing or placed too close to the corner. New Jersey state law (39:4-138) prohibits parking within 25 feet of intersections to maintain visibility and allow larger vehicles to turn. Striping designating the parking area continues into the no-parking area, which could create confusion as to where it is safe and legal to park (Figures 26 and 27).

Figure 26. Missing signage by train station.

Figure 27. Striping continues into "no parking" zone.

Safety

Safety considerations that can be observed through a walking audit include insufficient lighting, vehicle speeding, unsafe driver, pedestrian, or bicyclist behavior, and the general level of comfort influenced by the road environment and surrounding land uses.

The safety needs of pedestrians include lighting along sidewalks and at crosswalks for visibility to vehicle traffic. Although the audit occurred during the day, the placement of overhead light poles suggests that the corridor may lack a sufficient level of lighting coverage (Figure 28). Lighting is also not placed strategically at intersections or by crosswalks to maximize visibility.

Figure 28. Lengthy gap between streetlights.

To supplement the audit, town officials shared with the CSTA team photos taken of the corridor at night. In particular, the Deputy Mayor found that the Nelson Street intersection was dark (Figure 29). Fortunately, the area around the train station looked to be well lit. However, the lighting needs of both the sidewalks and the crosswalks should be assessed with a proper lighting study with measurements taken at conflict points. Additional photos can be found in Appendix C.

Figure 29. Looking south on Main St. toward Nelson St.

As the corridor includes residential properties, care must be taken when adding lighting to ensure proper shielding is used so that lighting illuminates the roadway and not the homes.

As noted in the Assessment of Need, traffic studies have found that most drivers are exceeding the 25 mph speed limit. Bike racks are located at the train station, but no bike lanes or paths are present (Figure 30). During the walk audit, teenagers were observed biking on the sidewalk, but no bicyclists were seen on the road.

Figure 30. Bicycle racks at train station and library.

Comfort and Appeal

The area was observed to be free of litter, graffiti, and other quality-of-life concerns that could discourage walking or bicycling (Figure 31). Most residential properties are well maintained. While some segments have attractive, mature trees, other segments lack trees close to the roadway. Trees can create a buffer between pedestrians and moving vehicles, increasing comfort. Trees are also essential in providing shade, helping to lower sidewalk temperatures during the summer.

The corridor lacks amenities such as benches, trash cans, or bicycle racks, with the exception of the train station and library.

Truck traffic can be uncomfortable for pedestrians walking along the narrow sidewalk, and for bicyclists sharing the road.

Figure 31. Main Street.

Detailed Conditions and Recommendations

Many of the conceptual recommendations contained in this report will require further study and design to determine their feasibility and conformity with state and County roadway standards. The Township should work closely with Hunterdon County, the roadway owner and operator, who will be responsible for approving or implementing many of these recommendations in partnership with the Township.

The recommendations in this section include short and long-term Complete Streets improvements. They also include illustrations of roadway features that are not part of current County roadway plans or design practices, including bicycle lanes and curb extensions on Main Street/CR 523. These are provided as illustrations of improvements that may be considered in the future as the County and the municipality work to implement the draft LSAP, which includes strategies related to improving the safety of active transportation users and implementing Complete Streets policies and projects, as well as the Hunterdon County Bicycle Plan, currently in development.

Typical cross section and tradeoffs

Although the study area was limited to a half-mile corridor centered on the "downtown" section of Main Street, it is important to acknowledge that the roadway provides an important north-south connection through Readington. According to the New Jersey Complete Streets Design Guide, "many main streets are located on roadways that provide regional connectivity, which presents challenges in balancing local community needs with regional transportation concerns. Main street design should limit traffic speeds, encourage safe and comfortable pedestrian activity, facilitate commerce, and support inviting public spaces."

The cross section of the roadway varies within the study area but appears to be consistent as it runs through rural land to the south, except for added lanes at intersections. South of High Street, Main Street is around 30 feet wide, with one 11-foot travel lane in each direction and four-foot shoulders on both sides of the road (Figure 32). The speed limit is posted at 35 mph.

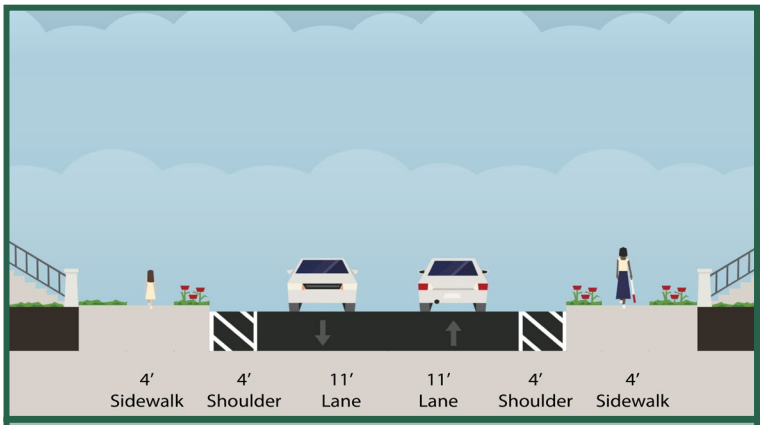


Figure 32. Main Street cross section south of High Street.

The thirty-foot cross section constrains but does not block design choices. Shoulders on rural roads serve multiple safety and functional purposes, including providing space for disabled vehicles to pull over, offering a recovery area for errant vehicles, and can accommodate bicyclists and pedestrians. Although bicyclists can ride in the shoulder, they are not typically maintained to travel standards. Four feet is also narrower than is recommended for bicycle lanes, especially for higher-speed roadways. While eleven-foot travel lanes are typical for rural roadways, narrower lanes are permitted. Narrower lanes have been shown to encourage lower speeds by making the roadway feel more restricted.

Restriping and signing the shoulder as a slightly wider bicycle lane, and ensuring it is clear and safe, would provide a safer and more comfortable transportation option for bicyclists (Figure 33).

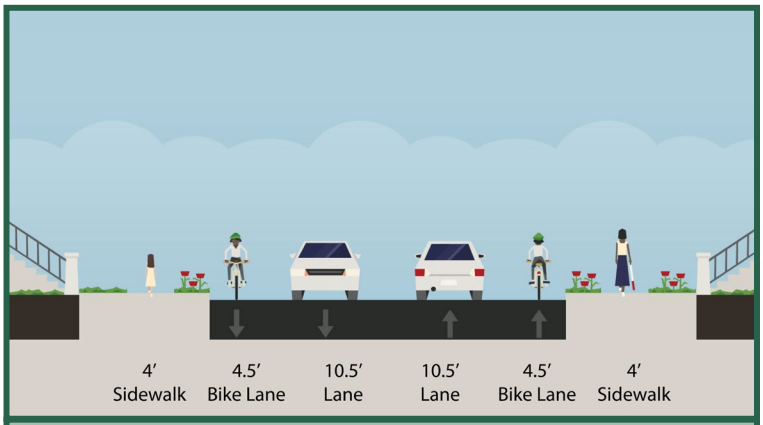


Figure 33. Main Street cross section with bicycle lanes.

The added width also creates more flexibility for bicyclists to avoid debris. Unlike a shoulder, a marked bicycle lane also provides additional visual cues to drivers that they should expect bicyclists on the roadway. Over the past decade, Mercer County has changed a number of shoulders into marked bicycle lanes as part of their road maintenance program (Figure 34).

There are other ways to allocate the existing roadway space. Removing the shoulders and replacing them with a parking area can help to support small businesses (Figure 35). In a small-town context, where there are sidewalks and a lower speed limit, parking can be a better use of space than a shoulder. However, this means that bicyclists must share the road with vehicles. While this is appropriate in a 25 mph segment, many people do not feel comfortable bicycling without a dedicated space, and as such, it is less likely that more people will choose to bicycle.

If the roadway is being rebuilt, there is an opportunity to fully reallocate the space by moving the curb. The next figure shows a narrower 22-foot roadway to accommodate vehicles, with the reclaimed space being used to support pedestrian activity through wider sidewalks and amenities (Figure 36). Wider sidewalks allow pedestrians to comfortably walk side by side. They also accommodate young bicyclists. Amenities such as benches and bicycle parking encourage non-motorized travel. Added space for trees can improve the visual appeal of the neighborhood and provide shade.

There are pros and cons to each design choice. Having one cross section for a rural area (for example, with bicycle lanes) and a different one for the built-up community (for example, wider sidewalks) is appropriate.

Figure 34. Bicycle lanes on a rural road.

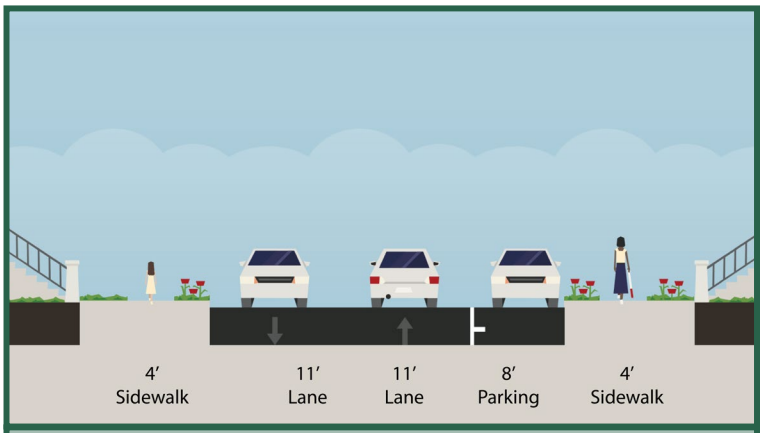


Figure 35. Main Street cross section with parking.

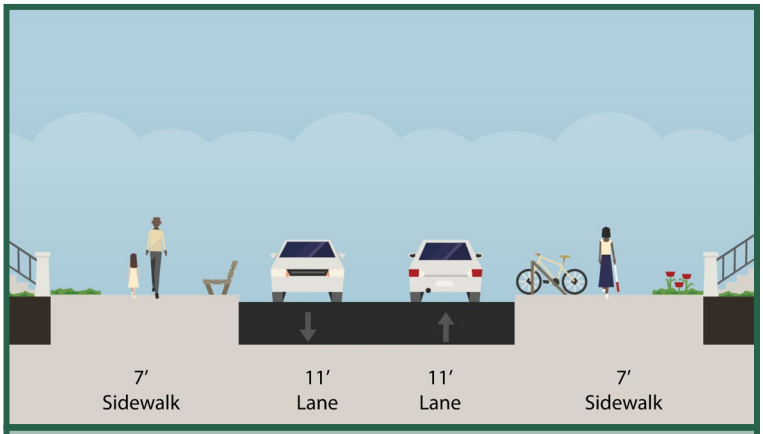


Figure 36. Main Street cross section with expanded sidewalks.

The next section looks at detailed conditions in each segment of the corridor, with recommendations. Many of the recommendations can be implemented in the short term by changing line striping. These changes can later be formalized with permanent infrastructure. Some changes re-imagine the corridor with wider sidewalks and other significant infrastructure changes. Implementing them would likely require an infrastructure grant.

High Street to Railroad Crossing

Moving north from High Street, the roadway widens gradually from 30 feet to close to 40 feet at the railroad crossing.

Just north of High Street, the shoulder widens on the west side to allow parking in front of Jerry's Brooklyn Grill. The exact start and end points of the parking area are not marked with striping or signage. At Bank Street, the shoulder on the east side disappears, creating a single 18-foot lane (Figure 37). An 8-foot shoulder is marked in front of the train station. Although the size and striping of the shoulder is identical to the parking area in front of Jerry's, there is a lack of signage allowing or prohibiting street parking.

Figure 37. Shoulder ends at Bank Street.

The sidewalk in front of Jerry's is around 8-feet wide, with an additional setback for outdoor tables. The outdoor dining helps to activate the roadway and create a sense of community (Figure 38). Just north of Jerry's, the sidewalk is interrupted by a wide (35-foot) driveway for the train station and library (Figure 39). Although this driveway is designed like a road, it does not appear to have a name. A faded standard crosswalk is painted across the driveway. There are curb ramps on each side but they do not meet ADA requirements. North of the driveway, the sidewalk is brick and becomes part of a landscaped plaza for the train station. The plaza includes benches, trash cans and bicycle parking (Figure 40).

Figure 38. Jerry's Brooklyn Grill.


Figure 39. Looking toward the train station driveway.

Figure 40. Train station amenities.

On the east side of the roadway, the sidewalk widens from five to eight feet at 256 Main Street and continues at that width toward the railroad crossing. The sidewalk continues at level across the entrance to Bank Street, which primarily serves as access to a surface parking lot. This design prioritizes pedestrians, as it is clear to drivers that they are crossing the pedestrian realm. This is in contrast to the crossing on the train station side where pedestrians must go down the ramp to street level and cross what appears to be a roadway. North of Bank Street, the sidewalk ends at the railroad right-of-way and transitions to an asphalt driveway.

Figure 41. Main Street businesses.

A high visibility crosswalk connects both sides of the road in front of the train station, providing convenient access to businesses and parking on both sides. However, the road is wide at this location (forty feet) and there is no streetlight.

The buildings in this segment are 2-3 story mixed use structures, with businesses on the first floor (Figure 41). While street parking is limited to just a few cars in front of Jerry's, all the properties appear to have parking in the rear, in addition to shared parking at the Bank Street lot.

Recommendations

Figure 42 on the next page shows one potential design for long-term recommendations along this segment. The roadway is reconfigured with two 11-foot lanes, with the reclaimed space converted to pedestrian use. Parking spaces are maintained in front of Jerry's. The train station driveway is narrowed with curb extensions, and the crosswalk is striped with high-visibility marking or upgraded to a raised crosswalk. A median south of the railroad improves safety for all roadway users by creating a pedestrian refuge island for pedestrians using the crosswalk. The median also increases railroad safety by blocking vehicles from going around the gates. On the east side, the sidewalk is extended north to the railroad crossing.

Bicycle shared lane markings, or sharrows, are shown for illustrative purposes, as they are not part of current County roadway plans or design practices for Main Street/CR 523. While sharrows are not dedicated bicycle infrastructure, they can be a useful tool for encouraging safe bicycling and driving. According to NJDOT, "a shared-lane marking is not a facility type but can be used to assert the legitimacy of bicyclists on the roadway and offer directional and wayfinding guidance."

Providing widened sidewalks and high-visibility crosswalks enhances the safety of vulnerable road users, while reducing the opportunity for crashes to occur. Installing a median and installing raised crosswalks also slows traffic, which reduces all types of crashes.

It is important to note that railroad crossings have specific design requirements which exceed the scope of this technical assistance, and any changes in the vicinity of the railroad crossing will require coordination with NJ TRANSIT.

In addition to these long-term recommendations, a variety of short-term improvements could be implemented with changes to signage and striping. These short-term improvements could be implemented using a quick-build approach described in the Additional Recommendations section.

- Clarify start and end points for on-street parking with signage and striping.
- Confirm that parking areas comply with Title 39 requirements related to the distance from intersections.
- Upgrade train station driveway crosswalk with high visibility striping.
- Narrow train station driveway entrance with painted curb extensions, in coordination with NJ TRANSIT.
- For northbound lane, continue the shoulder striping to rail crossing OR stripe a hatched median to narrow the current 18-foot lane.

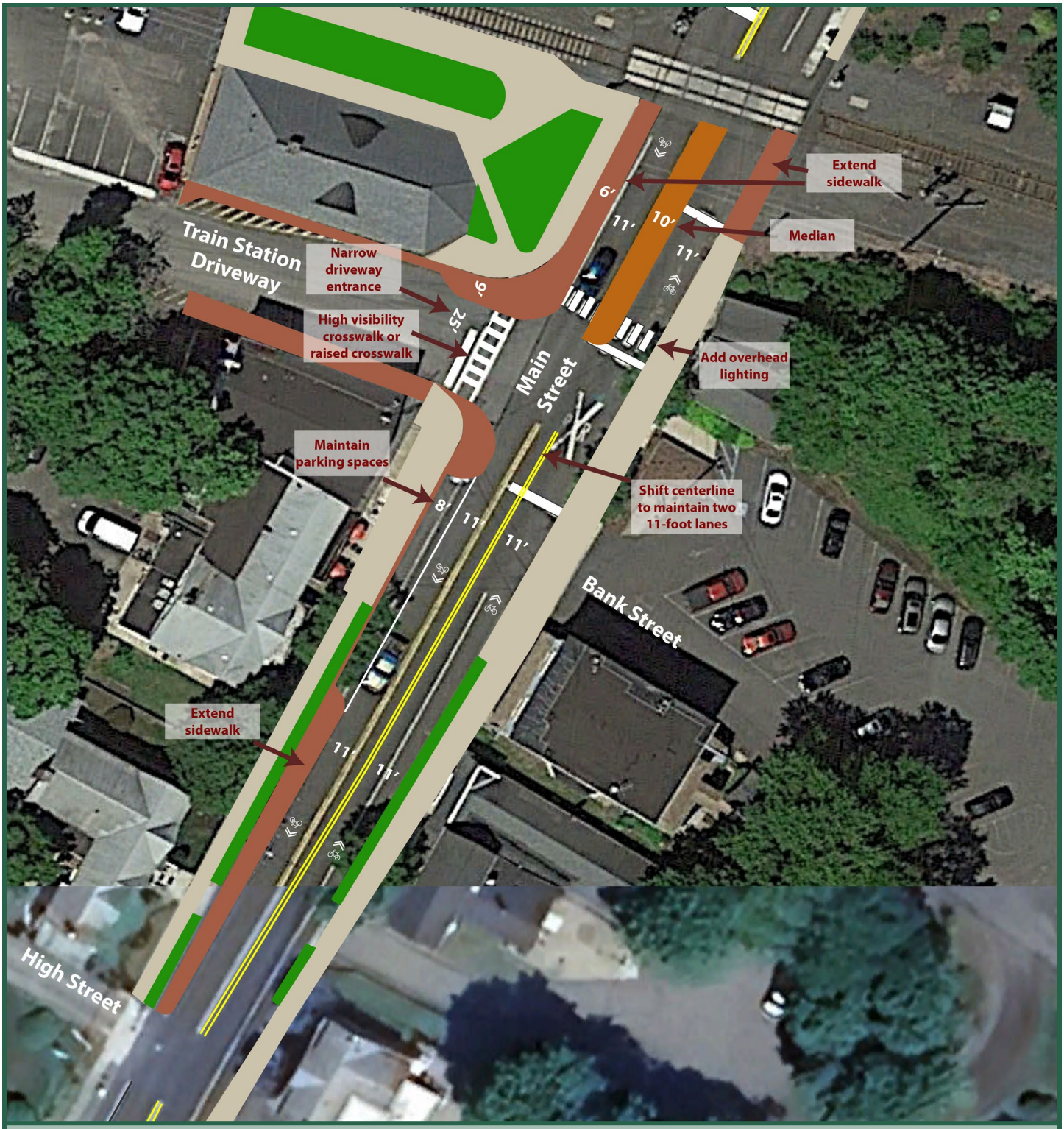


Figure 42. High Street to Railroad Crossing Recommendations.

Railroad Crossing to Railroad Avenue

North of the railroad, Main Street is 35 feet wide. The southbound travel lane is 16 feet wide with no shoulder and the northbound lane is ten feet wide with an eight-foot shoulder. The shoulder lacks signage stating whether parking is allowed or prohibited.

On the west side, a four-foot brick paver sidewalk is present in front of The Rail restaurant (Figure 43). North of the restaurant the sidewalk ends and is replaced by a wide paved driveway/shoulder that extends to Railroad Avenue. No signage is present indicating whether parking is permitted on this shoulder. The sidewalk resumes north of Railroad Avenue.

The sidewalk on the east side is around eight feet wide and made of concrete. Between the railroad and Somerset Street there is a gas station, and as such, much of the sidewalk is interrupted by driveways. The sidewalk is in poor condition, with cracks, dips, and gravel. The curb ramp for Somerset Street is in particularly bad shape (Figure 44).

North of Somerset Street, Main Street returns to a 30-foot width, consisting of two 11-foot travel lanes and a shoulder in the northbound direction only (Figure 45). Parking is allowed in the shoulder, although the signage is faded.

There is no crosswalk across Main Street at either Railroad Avenue or Somerset Street. Railroad Avenue provides access to the Brown-Ingram Memorial fields to the west. There is a high-visibility crosswalk striped across Somerset Street, but none striped across Railroad Avenue.

Curb extensions extend the curb line and sidewalk into the roadway, expanding the pedestrian realm. According to the New Jersey Complete Streets Design Guide, they "have a variety of benefits, including improving visibility for pedestrians and drivers, reducing the pedestrian crossing distance, calming traffic, and shielding on-street parking at intersection approaches."

Figure 43. Sidewalk in front of The Rail Restaurant.


Figure 44. Broken curb ramp.


Figure 45. Looking north from Somerset Street.

Recommendations:

Figure 46 on the next page shows long-term recommendations for this segment.

- Upgrade curb ramps to be ADA-compliant.
- Rebuild sidewalk in front of gas station to be ADA-compliant.
- Install a sidewalk in front of 207 Main Street.
- Install painted curb extensions at Somerset Street and Railroad Avenue and install a high-visibility crosswalk.
- Consider upgrading curb extensions to concrete curbs, which provide additional protection and can accommodate green infrastructure, if permitted by future changes to County roadway design practices.

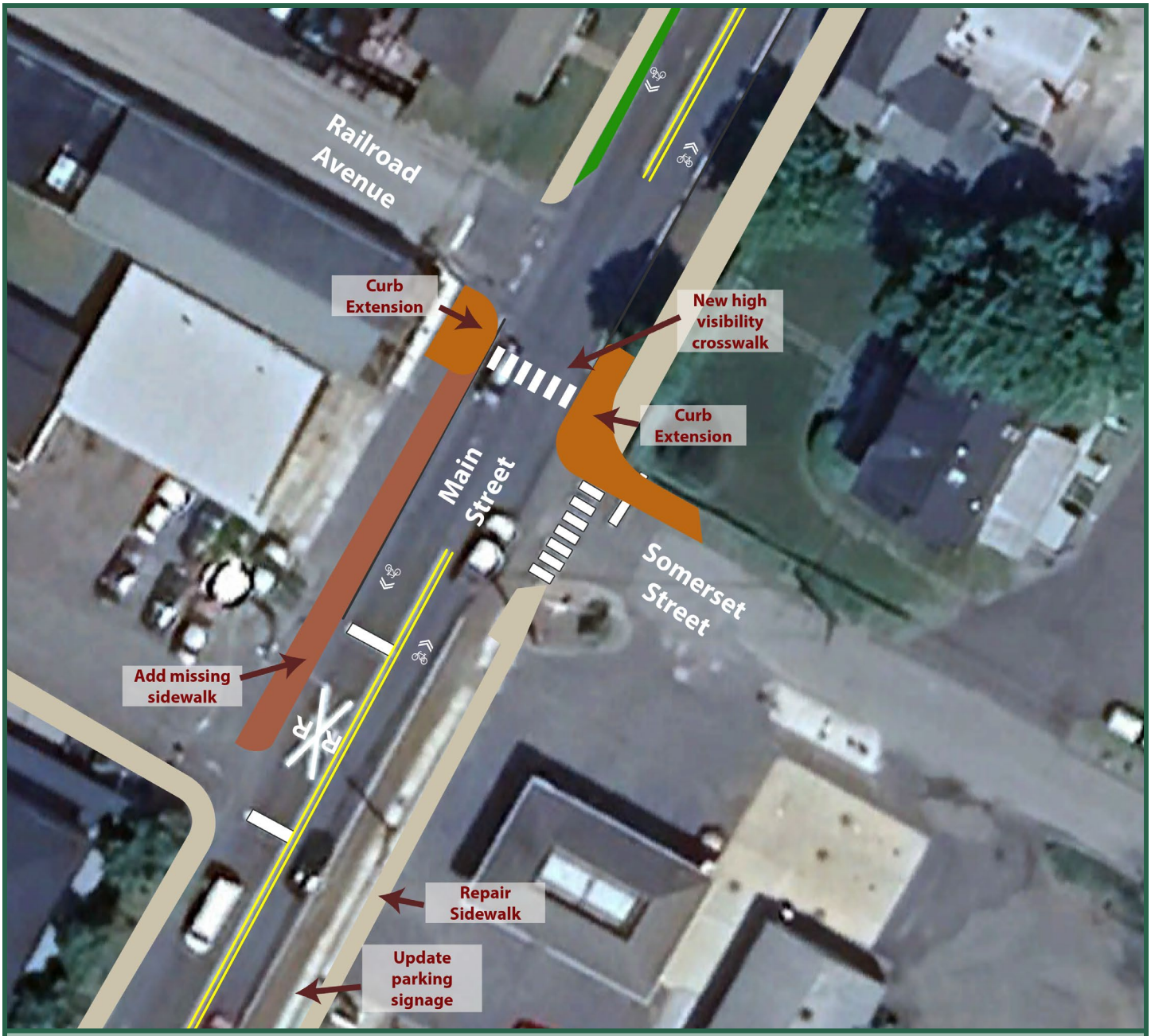


Figure 46. Railroad Crossing to Railroad Avenue Recommendations.

Railroad Avenue to Whitehouse Avenue

Continuing north, the Main Street cross section remains the same, with one lane in each direction and parking on the east side of the roadway. There are small businesses in mixed-use buildings on the east side until Whitehouse Avenue. Sidewalk conditions continue to vary. On the west side, a four-foot sidewalk is separated from the roadway by a narrow planting strip. The width of the sidewalk on the east side varies, becoming especially narrow in front of 146 Main Street before widening again in front of 142 Main Street (Figure 47). The east side sidewalk abuts the curb and shows condition issues such as cracks and deterioration that are not present on the west side.

Figure 47. Narrow sidewalk at 146 Main Street.

Whitehouse Avenue terminates from the east. High visibility marked crosswalks exist across Whitehouse Avenue and on the north side of the intersection across Main Street (Figure 48). However, there are no curb ramps on any corner. Pedestrian crossing signs are posted in both directions, but the northbound sign is located on the south side of the intersection instead of at the crosswalk. One overhead light exists at this intersection, and is also placed on the south side of the intersection instead of over the crosswalk. Due to the placement of driveways on the west side of the roadway, adding a crosswalk on the south side of the intersection may not be practical. “No parking here to corner" signs are correctly posted on both sides of the intersection but are not reinforced by a change in roadway striping.

Figure 48. Whitehouse Avenue intersection.

Whitehouse Avenue is 35-feet wide, wider than needed for one travel lane in each direction. Whitehouse Elementary School is located half a mile to the east. As such, the intersection may see heavy turn volume at school arrival and dismissal times.

Recommendations

Figure 49 shows long-term recommendations for this segment.

- Upgrade curb ramps to be ADA-compliant, including a new curb ramp on west side of intersection.
- Install painted curb extensions at Whitehouse Avenue intersection to narrow the roadway to 22 feet.
    - Consider upgrading painted curb extensions to concrete curb extensions, which provide additional protection and can accommodate green infrastructure, if permitted by changes to County roadway design practices.
- Widen the sidewalk at 146 Main Street to maintain a consistent sidewalk width.

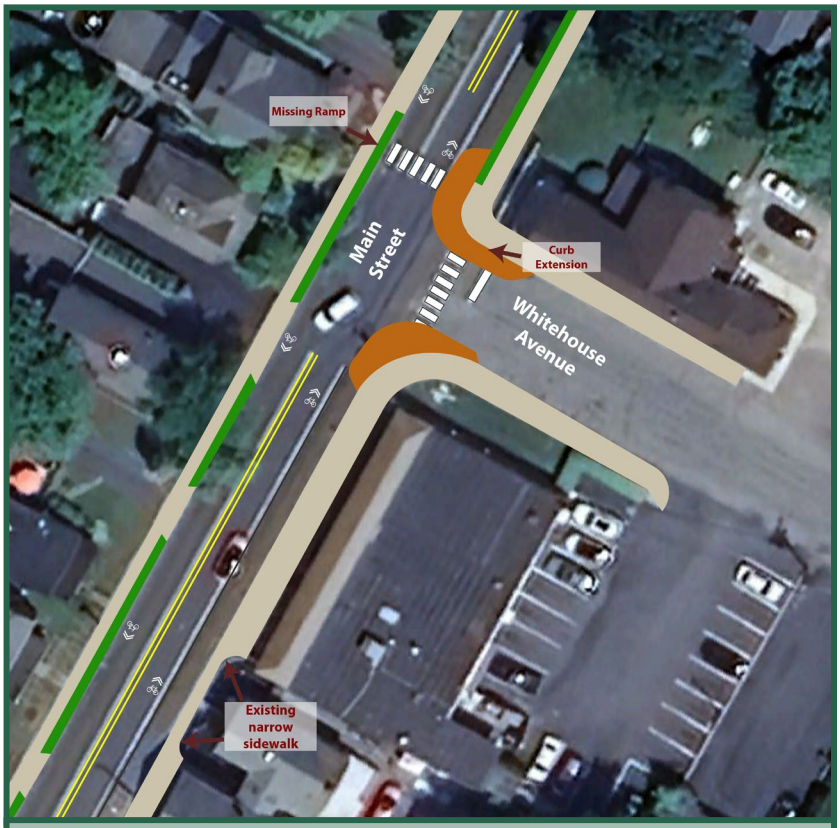


Figure 49. Railroad Avenue to Whitehouse Avenue Recommendations.

Whitehouse Avenue to Nelson Avenue

North of Whitehouse Avenue, the width of Main Street remains the same. However, the land use changes slightly, as there are no more storefronts. All the homes on the east side appear to have off-street parking in the rear, accessed via an alley. One option here is to eliminate the on-street parking to provide equal-width shoulders on both sides of the roadway. This would require shifting the centerline. The shoulders could also be converted to bicycle lanes that could then be continued north to the Washington Mall driveway, to serve the bicyclists observed during the workshop. Bicycle lanes are an FHWA Proven Safety Countermeasure that have also been shown to slow motor vehicle traffic, increasing safety for all road users. This is shown in Figure 51 for illustrative purposes only, because bicycle facilities are not part of current County roadway plans and practices for Main Street/CR 523.

The intersection with Nelson Street was reconfigured in the last decade (Figure 50). To the west, Nelson Street is 24 feet wide and provides access to a dozen homes and the baseball fields. To the east, Nelson was newly extended into The Willows at Whitehouse Station income-restricted apartment complex. The turning radius into the newly built roadway is significantly wider than the existing roadway across the street. A wide turning radius creates a longer crosswalk and encourages drivers to make the turn at a higher speed.

Figure 50. Nelson Street intersection, looking east.

Approaching Nelson Street, the sidewalk is in good condition on the east side and in fair condition on the west side. The curb ramps on the east side appear to meet ADA standards, while the ramps on the west side lack ADA-compatible geometry and detectable warning surfaces. There are three high visibility crosswalks at this intersection, and crosswalk signage posted. However, there are no streetlights anywhere near the intersection. Google Street View shows that one did exist prior to the reconfiguration, but it was not replaced when the utility pole was moved. The closest streetlights appear to be over 200 feet to the south and over 350 feet to the north.

Recommendations:

- Replace the streetlight at the Nelson Street intersection.
- Upgrade curb ramps on the west side of Nelson Street intersection to be ADA-compliant.
- Shift the centerline to provide shoulders on both sides Main Street.

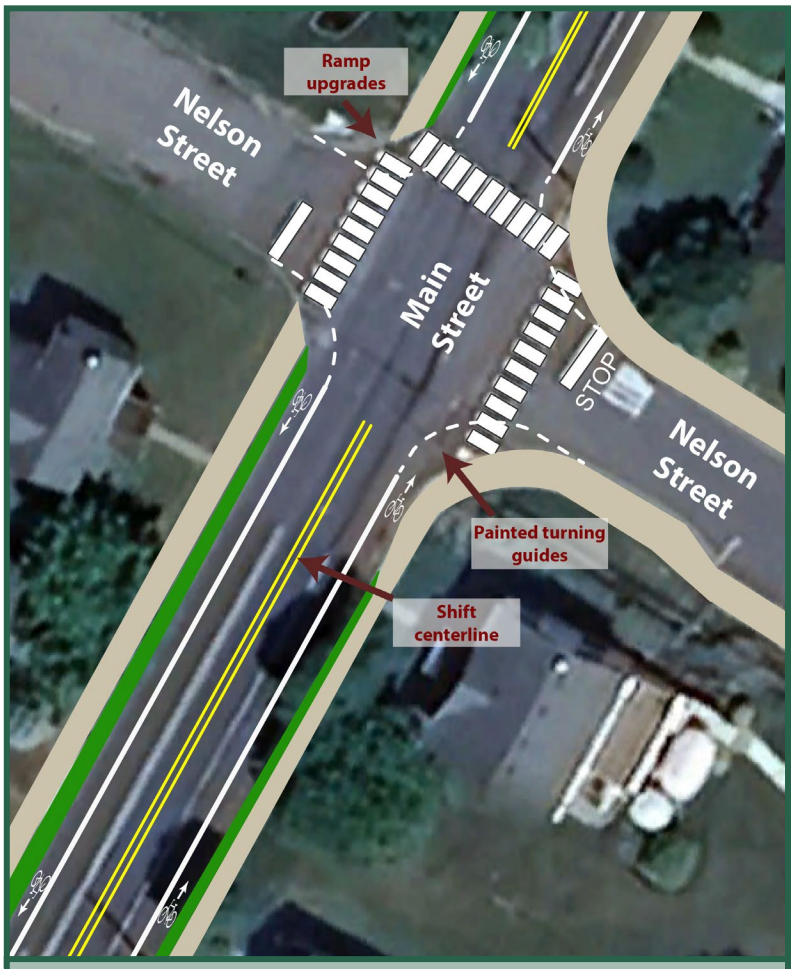


Figure 51. Whitehouse Avenue to Nelson Avenue Recommendations.

Nelson Avenue to Washington Drive

North of Nelson Avenue, the roadway and sidewalks continue as they were in the previous segment. Washington Drive meets Main Street at a 25-degree angle. This results in a wide 105-foot intersection (Figure 52). Additionally, Washington Drive has a second access point separated by a landscaped island to facilitate turns (Figure 53). While a traffic count of Washington Drive was not available, the roadway only serves eight homes. While it is bidirectional at Main Street, Washington Drive becomes one-way northbound, allowing a connection to eastbound Route 22. However, because Main Street also connects with Route 22, there is no reason for anyone but the residents of Washington Drive to use the street.

Figure 52. Washington Drive seen on the left.

On the west side of Main Street, the sidewalk follows Washington Drive for about 200 feet before ending (Figure 54). Pedestrians looking to continue on Main Street would have had to cross to the east side at Nelson Street, although there is no wayfinding signage. Rockaway Reformed Church is located at the north portion of the intersection. A sidewalk extends the length of the church grounds but ends at the church parking lot and is not ADA-accessible due to the presence of stairs. The sidewalk on the east side is continuous.

An added challenge to this intersection is that the church property is raised above Main Street by a retaining wall. The wall narrows the shoulder and blocks some visibility of Washington Drive (Figure 55).

Figure 53. Looking to Main St. from Washington.

Figure 54. Sidewalk ends on Washington Drive.

Figure 55. Retaining wall.

The draft LSAP recommends the installation of a mid-block crosswalk with a rectangular rapid-flashing beacon on Main Street in the vicinity of Washington Drive to address the lack of a west side sidewalk north of this location, as well as to accommodate church goers. This proposed future crosswalk could be further enhanced with a neckdown (mid-block curb extensions) or a pedestrian refuge island to call attention to the crossing, reduce the crossing distance for pedestrians, and communicate to drivers that slower speeds and caution are warranted as they enter Whitehouse Station (Figure 56). In addition, Readington could close one side of the Washington Drive access points to improve pedestrian access into the church.

Figure 56. "Gateway Treatment" in rural England.

This intersection presents a challenge, due to the change in grade, but also an opportunity. The angled section of Washington Drive comprises 3,800 square feet of road surface, more than is needed to provide access to the eight homes. Combined with the grassy island, 5,300 square feet of space is available.

The CSTA project team developed an alternative long-term vision for how the intersection could look if it was completely redesigned. Figure 57 on the next page shows Washington Drive combined into a single two-way road meeting Main Street at a right angle. Main Street is shown shifted to the west, creating a s-bend in the roadway. This serves two purposes. First, the s-bend can help to lower vehicle speeds, as navigating it requires active driving. Second, it creates a 90-degree intersection with Washington Drive, allowing for two short crosswalks and safe pedestrian access to the church, parking lot, and continued travel north. The Main Street crosswalk is shifted south away from the raised church property, ensuring good visibility.

Instead of a small, landscaped island, which is unused, shifting the road creates a continuous new space on both the east and west sides that could incorporate pedestrian amenities, art, or other features of a small park. The new space also creates an opportunity to install gateway signage welcoming visitors to the Whitehouse White House Station community. A gateway feature can also help transition drivers from a highway mindset to a community mindset.

A complete redesign of the roadway is a significant investment. In the short term, Readington should work with the County to implement the recommendations of the draft LSAP.

Short-term Recommendations:

- Add streetlights.
- Add high-visibility crosswalk with rapid-flashing beacon.
- Incorporate "gateway" treatment elements, such as a median island, speed limit signage, and speed limit stencils.

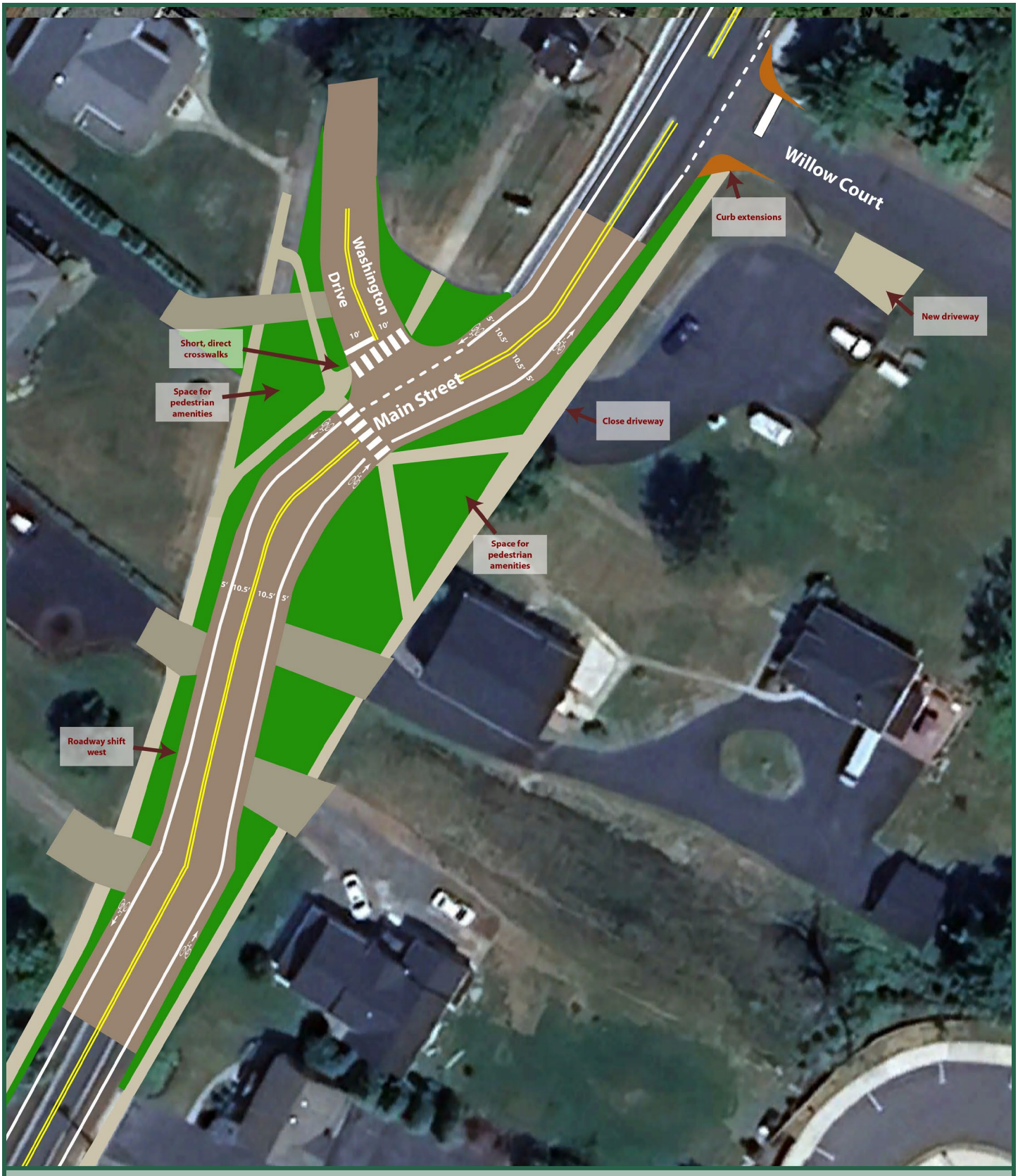


Figure 57. Long-term vision for Main Street and Washington Drive.

Washington Drive to Whitehouse Mall

North of the Washington Drive intersection, the sidewalk continues only on the east side. It is interrupted by a small intersection, with Willow Court. As with the previous intersections, the curb ramps are not ADA compliant. Properties north of Willow Court are spread much further apart than in previous segments, and the road slopes over a small hill (Figure 58). While the speed limit is still posted at 25 mph, drivers appear to speed up as they head toward the highway. The sidewalk ends at the driveway into the mall, and the roadway widens significantly (Figure 59). This creates a major gap in the pedestrian network for bicyclists and pedestrians looking to access the mall or to go north across Route 22. Workshop attendees noted that plans are in place to extend the sidewalk into the mall, and this sidewalk addition is recommended in the draft LSAP, however walkers will still lack a safe pedestrian pathway for the approximately 550 feet of Main Street between the mall driveway and the crosswalks at the intersection with Route 22.

Although the intersection with Route 22 was not within this project scope, the team noted that Washington Drive could provide connectivity for bicyclists and pedestrians looking to go northwest. This is because it is just 500 feet between the intersection of Washington Drive and Route 22 and the signalized intersection with Oldwick Road. A shared use path on the south side of Route 22 could provide a connection to the existing crosswalk. Pedestrian accommodations would need to be added along Washington Drive, but could include on-road facilities (Figure 60).

Recommendations:

- Add streetlights.
- Work with NJDOT on sidewalk connectivity to Route 22.

Figure 58. Looking north on Main Street.

Figure 59. Main Street at the shopping plaza entrance.

Figure 60. On-road sidewalk in Seattle, WA.

Additional Recommendations

1. Provide and Maintain High-Quality Pedestrian Infrastructure

Unmaintained or narrow sidewalks can make walking challenging. The project team observed deteriorated sidewalk conditions in various areas. In many cases, the uneven sidewalk makes entire blocks inaccessible to pedestrians with disabilities. While sidewalks are the responsibility of property owners in New Jersey, individual replacement can be very costly. The Township should consider a coordinated project to rebuild sidewalks throughout the entire corridor using a dedicated assessment or grants.

2. Create a Unified Look and Sense of Place along the Corridor

Readington Township is a historic town with populated town centers within an expansive rural context. The Whitehouse Train Station and downtown businesses attract both commuters and residents from the surrounding area. However, the Main Street streetscape lacks some of the visual cues and uniformity in its appearance that are characteristic of an inviting downtown. Creating a unified look and sense of place along Main Street would make the corridor more appealing to residents, commuters, and tourists.

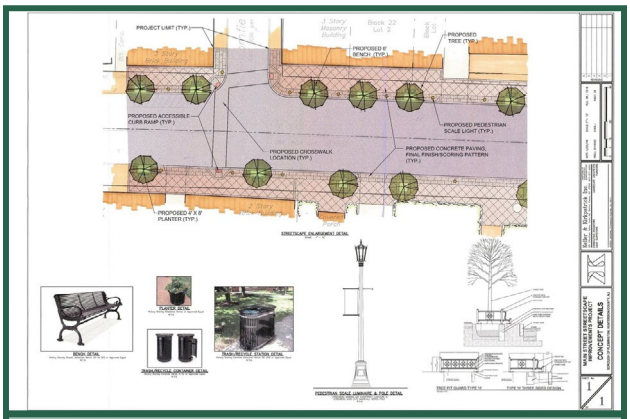


Figure 61. Flemington Township streetscape project.

Widening the sidewalk and introducing streetscape elements along the corridor— trees, streetlights, benches, signage, landscaping, etc.—can help create a sense of place when designed in a consistent and coordinated manner. For instance, consistently placed and properly maintained trees could create a pleasant rhythm along the street, which can help both define and reinforce the street character. A wider sidewalk allows for a comfortable and accessible walking zone. Flemington Township recently completed a streetscape project along its Main Street (Figure 61).

Figure 62. Union Township streetscape project.

Following a standard design and layout for signage and pedestrian-oriented lighting would also help the area's sense of place. Light posts could be alternately combined with signage banners and planters. The Union Township image also highlights several additional key aspects of an attractive and safe downtown–wide sidewalks, highly visible crosswalks, abundant seating, and cleanliness–that were discussed in the previous section (Figure 62).

Additionally, other roadway elements such as crosswalk ramps and curb extensions could provide several new opportunities to add to the corridor's appearance. For instance, curb extensions can be combined with green infrastructure elements, more seating, and bicycle parking. It is important that the Township focuses on the proposed streetscape elements in a coordinated fashion to create a unified character for the street rather than looking at them as individual elements.

3. Add and Maintain Street Trees

Street trees improve pedestrian comfort by providing shade and creating a buffer between moving vehicles and the sidewalk. In addition, they provide aesthetic and air quality benefits and help to absorb stormwater. Efforts should be taken to ensure that sidewalk restoration creates opportunities for new tree wells.

4. Lighting

A lighting study was not conducted as part of this project, and the study area was not visited at night. However, residents shared photos of the corridor at night and highlighted dark intersections (See Appendix C) Crashes occurring at night are significantly more likely to result in fatalities than those in daylight conditions. Lighting increases the visibility of all roadway users and is a way to systematically improve safety. As such, lighting is an FHWA Proven Safety Countermeasure[2].

In some cases, lighting can have negative environmental and community impacts, such as glare, light pollution, disturbance of adjacent properties, undesirable aesthetic impacts, and disruption of wildlife. Therefore, the amount, type, and placement of any additional lighting should be carefully considered to provide a safety benefit while also minimizing these impacts (Figure 63). As the corridor is in a rural context, is important to consider lighting styles that do not disrupt the circadian rhythm of wildlife.

Figure 63. Lighting illustration by DarkSky.

5. Quick-build implementation

Curb extensions were recommended throughout the corridor. In the short term, this can be installed as a demonstration project by using low-cost materials (Figure 64). As funding allows, these can be upgraded to a permanent feature, which can include the addition of green infrastructure. The draft LSAP recommends the use of the NJTPA Complete Streets Demonstration Library as a method to assess and prioritize safety recommendations.

Figure 64. An intersection narrowed with a quick-build curb extension.

6. Public Education

Balanced with infrastructure changes and increased enforcement, educational material about traffic safety and active transportation can be shared with the public through marketing campaigns, at community events, and through integration into school materials. The draft LSAP recommends incorporating education and outreach as a supplemental component of road safety improvements. This education and outreach can promote road safety in addition to the benefits of multimodal transportation. Educational materials are available from a variety of sources, including goHunterdon transportation management association, the NJTPA, NJ Division of Highway Traffic Safety, and the NJ Bicycle and Pedestrian Resource Center.

2. https://safety.fhwa.dot.gov/roadway_dept/night_visib/docs/Pedestrian_Lighting_Primer_Final.pdf

Conclusion

Main Street serves as an important corridor for the Whitehouse Station neighborhood within Readington Township. The study corridor is anchored by a train station, library, and small businesses. Residents also walk to an elementary school and athletic fields less than a half mile from the corridor.

Local officials interested in improving walking and bicycling conditions along the corridor applied to the CSTA Program to audit current conditions and develop recommendations for potential improvements. As part of this assistance, local stakeholders received an educational workshop on Complete Streets and participated in a walkable community workshop.

This report identifies several recommendations that could improve pedestrian and bicycle access to nearby destinations and discourage unsafe driving behaviors using a range of designs consistent with the New Jersey Complete Streets Design Guide.

Some of the recommendations require capital expenditure, such as a replacement of sidewalks and curb ramps. Others can be implemented during periodic maintenance, such as by upgrading crosswalk striping and parking signage. More intensive and costly roadway changes, such as curb extensions, stormwater tree pits, and green infrastructure, may be best suited for competitive funding grants. A list of funding sources that can be used by municipalities to implement pedestrian and bicycle improvements is included as Appendix C.

Some of these improvements can begin as demonstration projects or as part of regular municipal road maintenance. By making the changes quickly and with low-cost materials, the Township can receive meaningful feedback from residents based on their real-world experience. If the improvements are ineffective or have unintended consequences, they can be easily removed. Nearly all of these changes will require coordination with Hunterdon County officials.

Figure 65. Main Street.

Appendix

A. Potential Funding Resources

B. Design Resources

C. Workshop Flyers

D. Workshop Agenda and Field Audit Form

E. Nighttime View of Main Street

A. Potential Funding Resources

This appendix provides a list of grant programs available to New Jersey communities for the advancement of Complete Streets initiatives, including both infrastructure and non-infrastructure projects, and programs to increase walking and bicycling. A table has been included that lists the most common grant sources for Complete Street related projects. This appendix also includes links to two online databases with additional funding sources. The grants listed are highly competitive; grant application requirements should be carefully reviewed before deciding to apply. Incomplete grant applications may be automatically rejected. The most successful applications tell the story of the populations most in need of the proposed improvements, especially traditionally underserved or vulnerable populations. Applications should use compelling pictures, data, and other documentation, and indicate how and why the project was selected.

New Jersey Department of Transportation

The Division of Local Aid and Economic Development at the New Jersey Department of Transportation (NJDOT) administers funds to local public agencies such as county and municipal governments for construction projects to improve the state's transportation system. Grant support and technical assistance is provided through the Local Aid Resource Center's Help Desk (https://njdotlocalaidrc.com/). The New Jersey Transportation Trust Fund and the 2021 Bipartisan Infrastructure Law provide the opportunity for funding assistance to local governments for road, bridge, and other transportation projects. While NJDOT and the three metropolitan planning organizations that cover the state administer many federal aid programs, including Transportation Alternatives and Safe Routes to School, the USDOT administers some grant programs directly. NJDOT administers state aid programs. Below are some options for funding infrastructure projects through NJDOT.

State Aid Infrastructure Grant Programs

Municipal Aid: This program assists municipalities in funding local transportation projects, and all New Jersey municipalities are eligible to apply. NJDOT encourages applications for pedestrian safety improvements, bikeways, and streetscapes. Additionally, a common strategy to implement on-street bike lanes is to include bike lane striping within repaving projects that are funded through this program. Learn more here: https://njdotlocalaidrc.com/state-funded-programs/municipal-aid

County Aid: County Aid funds are available for the improvement of public roads and bridges under county jurisdiction. Public transportation and other transportation projects are also included. Learn more here: https://njdotlocalaidrc.com/state-funded-programs/county-aid

Bikeways: This program provides funds to counties and municipalities to promote bicycling as an alternate mode of transportation in New Jersey. A primary objective of the Bikeway Grant Program is to support the State's goal of constructing 1,000 new miles of dedicated bike paths that are physically separated from vehicle traffic. Learn more here: https://njdotlocalaidrc.com/state-funded-programs/bikeways

Safe Streets to Transit: This program encourages counties and municipalities to construct safe and accessible pedestrian linkages to all types of transit facilities and stations, to promote increased usage of transit by all segments of the population and decrease private vehicle use. Learn more here: https://njdotlocalaidrc.com/state-funded-programs/safe-streets-to-transit

Transit Village: This program awards grants for transportation projects that enhance walking, biking, and/or transit ridership within a ½ mile of the transit facility. Municipalities must already be designated as a Transit Village by the NJDOT Commissioner and the inter-agency Transit Village Task Force to be eligible to apply. Learn more here: https://njdotlocalaidrc.com/state-funded-programs/transit-village

Other NJDOT Assistance

Bicycle and Pedestrian Planning Assistance (BPPA): NJDOT offers local planning assistance through the Bureau of Safety, Bicycle, and Pedestrian Programs. Under the BPPA program, on-call consultants are paired with communities to complete a variety of projects, including bicycle and pedestrian plans, safety assessments, trail feasibility studies, and improvement plans for traffic calming projects. Priority is given to traditionally underserved communities and those with a documented safety concern. For more information, please contact the NJDOT Bicycle and Pedestrian Coordinator at bikeped@dot.nj.gov.

State-Administered Federal Aid Infrastructure Grant Programs

Transportation Alternatives Program: The Transportation Alternatives Program is a set-aside of the Surface Transportation Block Grant Program, and it is sometimes referred to as TA Set-Aside. It provides federal funds for community-based "non-traditional" transportation projects designed to strengthen the cultural, aesthetic, and environmental aspects of the nation's intermodal system. Municipalities can receive bonus points on the grant if they have an adopted Complete Street Policy, are a Targeted Urban Municipality, or are a designated Transit Village. Learn more here: https://njdotlocalaidrc.com/federally-funded-programs/transportation-alternatives

Safe Routes to School: The Safe Routes to School Program is funded through the Federal Highway Administration's (FHWA) Federal Aid Program and is being administered by the NJDOT, in partnership with the North Jersey Transportation Planning Authority (NJTPA), the Delaware Valley Regional Planning Commission (DVRPC), and the South Jersey Transportation Planning Organization (SJTPO). The program provides federal funds for infrastructure projects that enable and encourage children in grades K-12, including those with disabilities, to safely walk and bicycle to school. Applicants can receive bonus points on the grant if they have School Travel Plans, a Complete Streets Policy, and Transit Village designation. Learn more here: https://njdotlocalaidrc.com/federally-funded-programs/safe-routes-to-school

Recreational Trails Program: The Recreational Trails Grant Program administered by the NJDEP Green Acres Program provides federal funds for developing new trails and maintaining and restoring existing trails and trail facilities including trails for non-motorized, multi-use (including land and water) and motorized purposes. The program is currently on hold as it undergoes revisions. Learn more and get notified of future grant opportunities here: https://dep.nj.gov/greenacres/trails-program-home/

Federal Highway Administration-Administered Federal Aid Infrastructure Grant Programs

The Bipartisan Infrastructure Law (BIL), also known as the Infrastructure Investment and Jobs Act of 2021 (IIJA), and the Inflation Reduction Act of 2022 (IRA) established new funding programs that can be helpful for county and municipal governments looking to fund Complete Streets and other safety and active transportation projects. The new funding generally requires a 20 percent local match on a cost-reimbursement basis. In other words, for every dollar spent within the grant's budget, up to 80 cents will be eligible for reimbursement by the federal government. Eligible entities apply for grants directly to the United States Department of Transportation through the grants.gov online portal.

Safe Streets and Roads for All Program (SS4A): This program was established out of the Infrastructure Investment and Jobs Act of 2021 (IIJA). It funds planning and implementation of projects and strategies which share a goal of eliminating roadway deaths and serious injuries. Many Complete Streets-related measures are eligible. Funding can be used to produce a comprehensive safety action plan, undergo demonstration projects, and implement permanent measures. Congress has appropriated $5 billion to the program through fiscal year 2026, and all grants require a 20 percent local match. The SS4A program supports the National Roadway Safety Strategy and the United States Department of Transportation's goal of zero deaths and serious injuries on our nation's roadways. Counties, municipalities, and other non-State government entities are eligible to apply. Applications for the 2023 fiscal year are due on July 10, 2023. More information is available here: https://www.transportation.gov/grants/SS4A

Reconnecting Communities Pilot Program (RCP): The Reconnecting Communities Pilot Program was established by the Infrastructure Investment and Jobs Act of 2021 (IIJA). The program aims to correct wrongs of past transportation projects that have isolated or otherwise cut off communities from jobs and other amenities. Ideal projects improve access in one or more ways, increasing opportunities for residents of impacted communities. Congress has appropriated $1 billion for this program through fiscal year 2026. States, counties, and local units of government are eligible to apply for funding to plan and implement projects on facilities of which the applicant is the owner. Non-owners may apply for planning grants, as well as capital construction grants, provided that the facility owner has appropriately endorsed the application. All grants require a 20 percent local match. More information is available here: https://www.transportation.gov/grants/reconnecting-communities

Thriving Communities Program (TCP): The Thriving Communities Program provides technical assistance to governments and transit agencies. The program focuses on communities that have suffered historic disinvestment and lack the resources and capacity to successfully engage, develop, design, and deliver infrastructure projects. The program provides planning, technical assistance, and capacity building to better navigate federal requirements, identify financing and funding opportunities, and grow long-term capacity to leverage transportation investments to achieve broader economic and community development goals. More information is available here: https://www.transportation.gov/grants/thriving-communities

Neighborhood Access and Equity Grant Program: This program was created by the Inflation Reduction Act of 2022 (IRA). Much of the eligibility and criteria are similar to the Reconnecting Communities Pilot (RCP, see above). It appropriates an additional $1.8 billion to reconnecting communities.

Health and Environment Funding

Sustainable Jersey: The Sustainable Jersey Small Grants program provides capacity building awards to municipalities to support local green teams and their programs and is not project specific. Learn more about grant opportunities here: https://www.sustainablejersey.com/grants/

Sustainable Jersey for Schools: Sustainable Jersey for Schools grants are intended to help districts and schools make progress toward Sustainable Jersey for Schools certification. Learn more here: http://www.sustainablejerseyschools.com/

Funding from Other Sources

Various other funding sources exist that may help municipalities further cComplete Streets projects. Both Sustainable Jersey and Together North Jersey have developed comprehensive online databases that catalog the many funding sources available. They can be found at the following locations:

Together North Jersey Funding and Resources Database: https://togethernorthjersey.com/funding-tools-database/

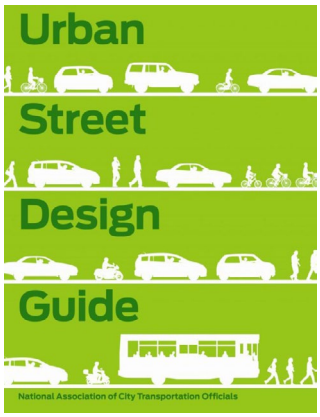
New Jersey Transportation Infrastructure Bank (NJTIB): The NJTIB is an independent State Financing Authority responsible for providing and administering low interest rate loans to qualified municipalities, counties, and regional authorities in New Jersey. The unique partnership with NJDOT was established with the mission of reducing the cost of financing transportation projects in the state. Learn more here: https://www.njib.gov/njtib

County and Municipal Capital Programs: In the case where alternative funds are not available but there is community consensus and political will to move forward with a project, county and municipal capital programs should be considered. Local budgets may have the ability to support some projects, especially if other state and federal programs provide budget relief in other areas.

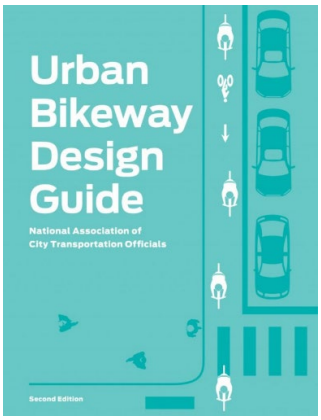
County and Municipal Open Space Trust Funds: All New Jersey counties and many New Jersey municipalities have an Open Space Trust Fund, which is a dedicated program supporting open space land acquisition. The trust funds are established by ballot measure. Depending on the fund parameters, other development projects can be eligible including trails, historical preservation, and farmland protection. For a database of ballot measures descriptions with amount of Open Space Trust Funds, visit the Trust for Public Lands LandVote Database. https://tpl.quickbase.com/db/bbqna2qct?a=dbpage&pageID=8

B. Design Resources

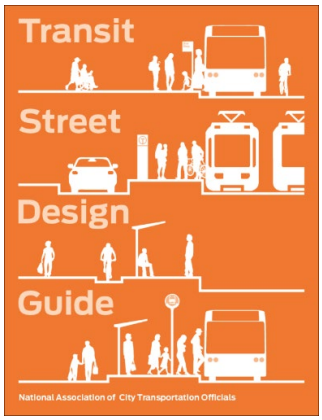
NACTO Guides



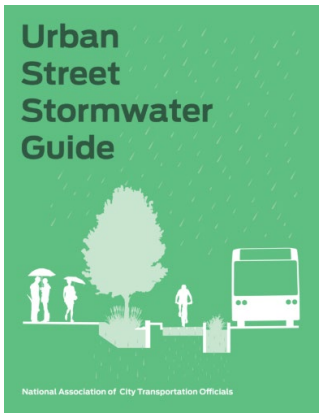
[Urban Street Design Guide]



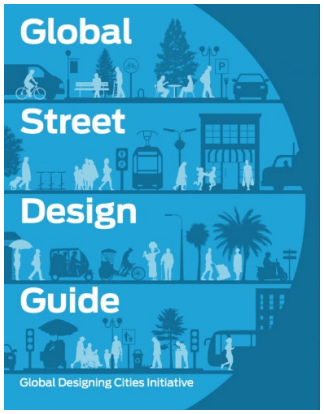
[Urban Bikeway Design Guide]



[Transit Street Design Guide]

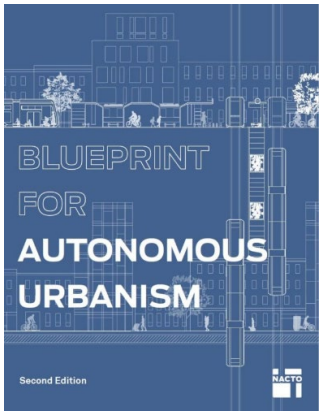


[Urban Street Stormwater Guide]



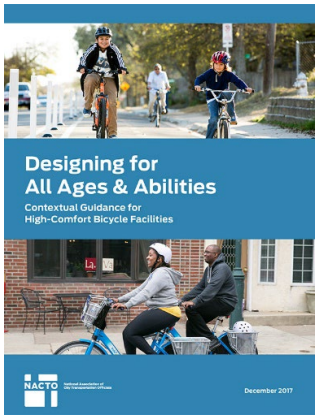
[Global Street Design Guide]

[Designing Streets for Kids]



[Blueprint for Autonomous Urbanism]

[Bike Share Station Siting Guide]

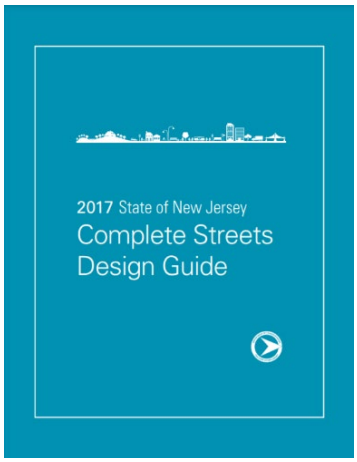


[Designing for All Ages & Abilities]

[Don't Give Up at the Intersection]

NJDOT Guides

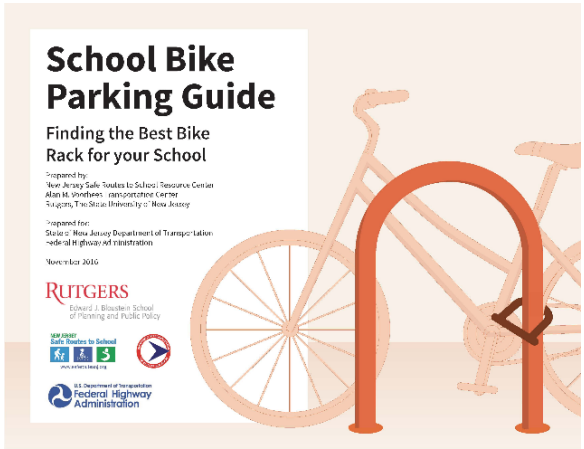
[Complete & Green Streets for All: Model Policy & Guide]



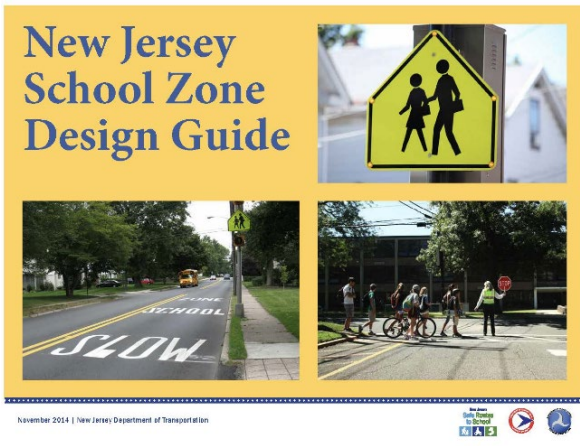
[2017 State of New Jersey Complete Streets Design Guide]

[A Guide to Creating a Complete Streets Implementation Plan]

[A Guide to Policy Development]

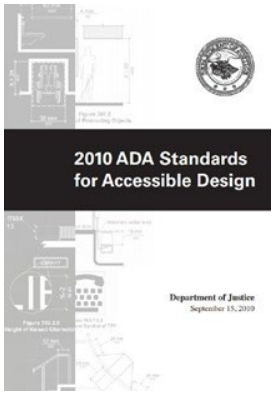


[School Bicycle Parking Guide]



[New Jersey School Zone Design Guide]

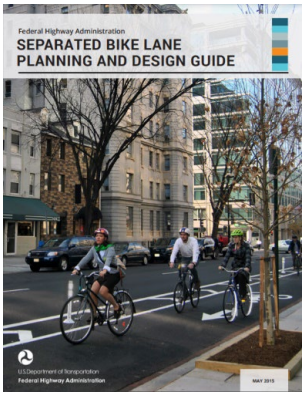
ADA Guidelines



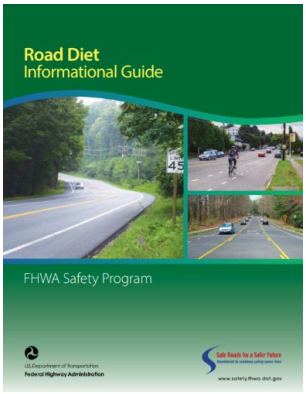
[ADA Standards for Accessible Design]

FHWA Guides

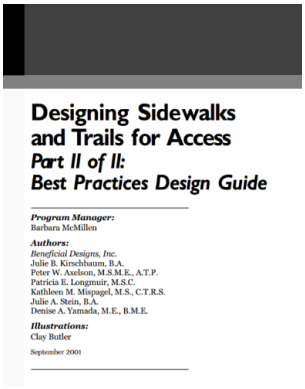
[Making Our Roads Safer: One Counter-measure at a Time]



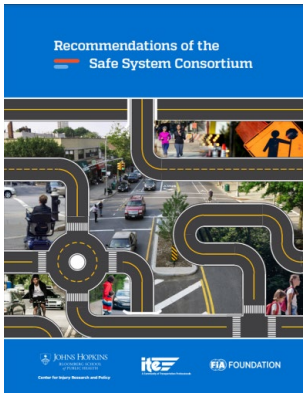
[Separated Bike Lane Planning and Design Guide]



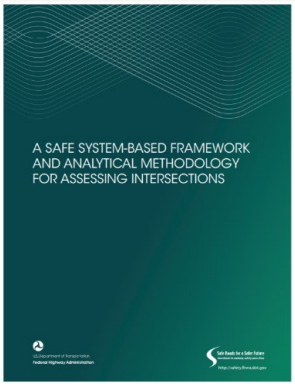
[Road Diet Informational Guide]



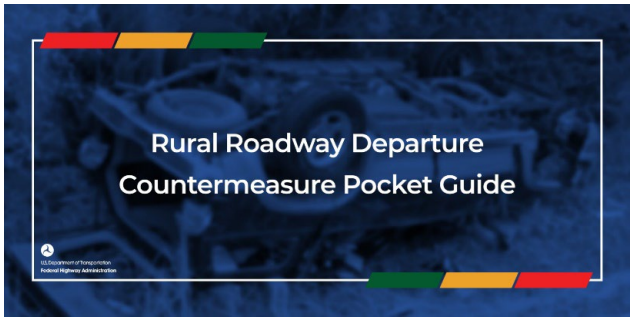
[Designing Sidewalks and Trails for Access Part II of II: Best Practices Design Guide]



[Recommendations of the Safe System Consortium]

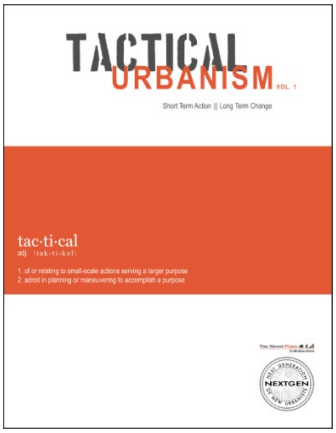


[A Safe System-Based Framework and Analytical Methodology for Assessing Intersections]

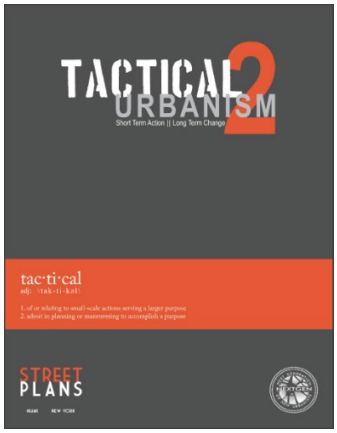


[Rural Roadway Departure Countermeasure Pocket Guide]

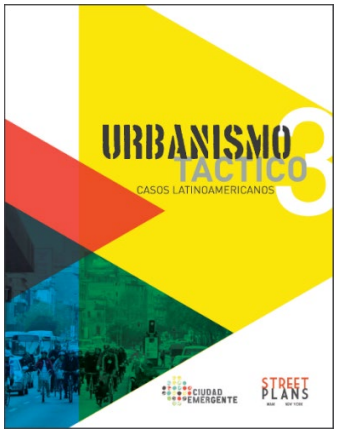
Tactical Urbanism Guides



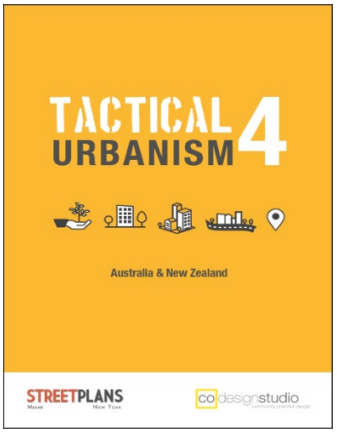
[Tactical Urbanism 1]



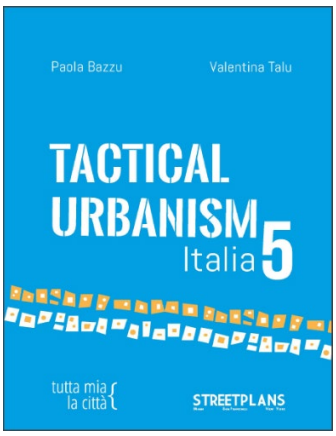
[Tactical Urbanism 2]



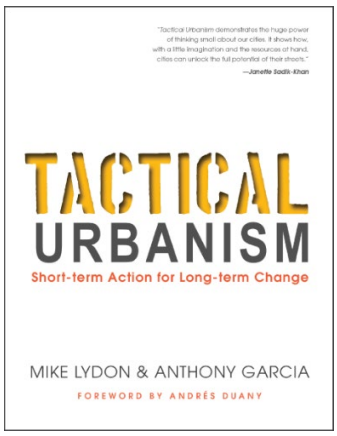
[Tactical Urbanism 3]



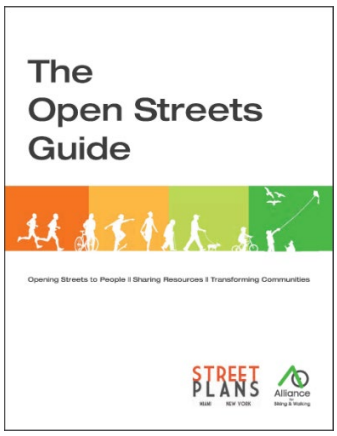
[Tactical Urbanism 4]



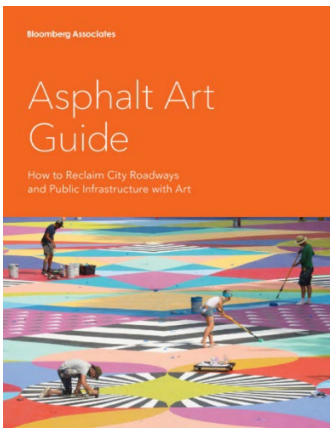
[Tactical Urbanism 5]



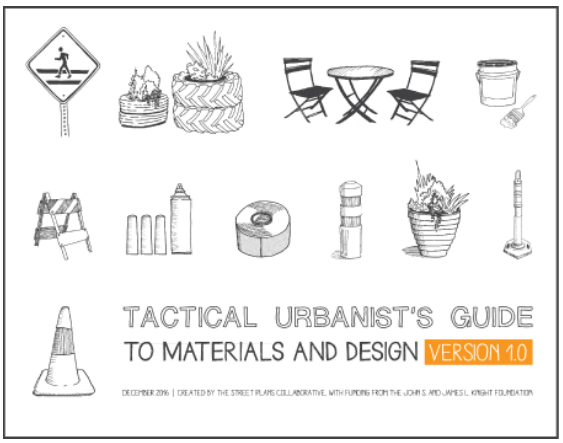
[Tactical Urbanism: The Book]



[The Open Streets Guide]



[Asphalt Art Guide]



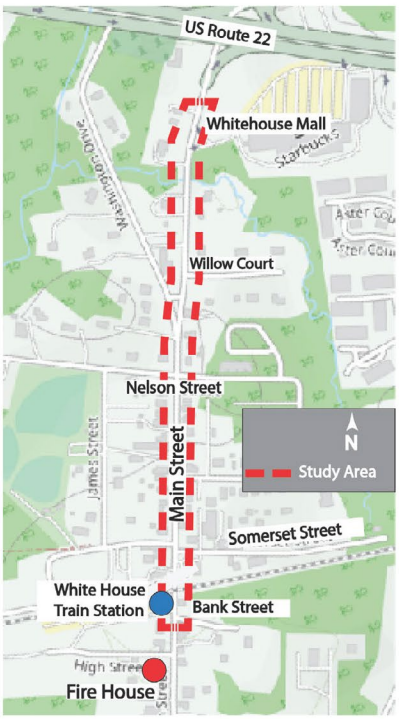
[Tactical Urbanist's Guide to Materials and Design]

[Fast-Tracked: A Tactical Transit Study]

C. Workshop Flyers

WALKABLE COMMUNITY WORKSHOP

Monday, August 12, 2024, 1:00 pm to 4:00 pm
Whitehouse Fire Company No. 1, 271 Main Street, Whitehouse Station, NJ



Join us to address walkability and bikeability on Main Street, from Whitehouse Mall shopping plaza at 72 Main Street to Bank Street

To register for this workshop, visit:
https://go.rutgers.edu/readington

Readington wants your input on how to improve Main Street!

A Walkability Workshop engages Township employees, residents, and businesses in a discussion about walking and biking. After learning about what to look for, workshop participants will walk a half-mile corridor, assessing existing streets and sidewalks and identifying issues to overcome to ensure safer and more welcoming conditions for pedestrians and bicyclists. After the workshop, a report will be prepared with recommendations on improvements to address key locations and issues identified in the workshop.

This effort is part of the Complete Streets Technical Assistance Program, a collaboration between Sustainable Jersey, the Voorhees Transportation Center at Rutgers University, and the North Jersey Transportation Planning Authority (NJTPA). Funded by the NJTPA, the program is designed to support municipal government efforts to advance Complete Streets initiatives.

WORKSHOP AGENDA

1:00 - 2:00 pm
Classroom Training

2:00- 3:00 pm
Walking Audit

3:30- 4:00 pm
Report Back and Next Steps

Township of Readington New Jersey

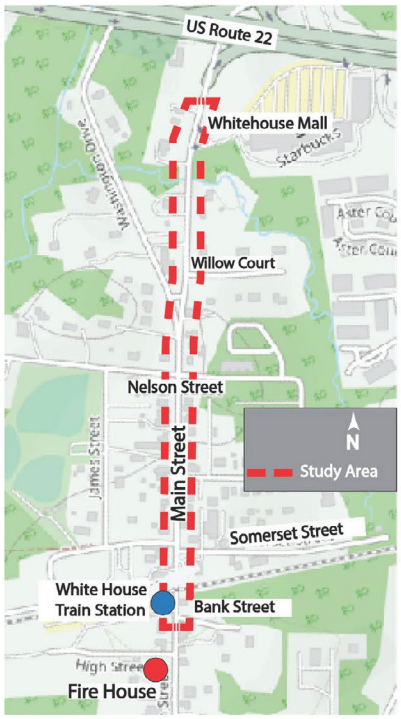
SUSTAINABLE JERSEY CERTIFIED

NJTPA NORTH JERSEY TRANSPORTATION PLANNING AUTHORITY

RUTGERS–NEW BRUNSWICK Edward J. Bloustein School of Planning and Public Policy Alan M. Voorhees Transportation Center

TALLER PRÁCTICO COMUNIDADES TRANSITABLES

Lunes, agosto 12, 2024, 1:00 pm to 4:00 pm
Whitehouse Fire Company No. 1, 271 Main Street, Whitehouse Station, NJ



Únase a nosotros para hablar sobre la accesibilidad para peatones y ciclistas en Main Street, entre Whitehouse Mall y Bank Street

Para registrarse a este taller, visite:
https://go.rutgers.edu/readington

¡Readington quiere tu opinión sobre cómo mejorar Main Street!

Este taller práctico involucra a empleados, residentes y empresas del municipio en temas relacionados con caminar y andar en bicicleta. Después de aprender qué buscar, los participantes del taller caminarán por un corredor de media milla, evaluando las calles y aceras existentes e identificando problemas a superar para garantizar condiciones más seguras y acogedoras para peatones y ciclistas. Después del taller, se preparará un informe con las mejoras recomendadas para abordar los problemas identificados en el taller.

Este esfuerzo es parte del Programa de Asistencia Técnica de Calles Completas, una colaboración entre Sustainable Jersey, el Centro de Transporte Voorhees en la Universidad de Rutgers, y la Autoridad de Planificación del Transporte del Norte de Jersey (NJTPA). Financiado por NJTPA, el programa está diseñado para apoyar los esfuerzos del gobierno municipal para promover iniciativas de calles completas.

AGENDA DEL TALLER

1:00 - 2:00 pm
Presentación

2:00- 3:00 pm
Auditoría a pie

3:30- 4:00 pm
Informe y próximos pasos

Township of Readington New Jersey

SUSTAINABLE JERSEY CERTIFIED

NJTPA NORTH JERSEY TRANSPORTATION PLANNING AUTHORITY

RUTGERS–NEW BRUNSWICK
Edward J. Bloustein School of Planning and Public Policy
Alan M. Voorhees Transportation Center

NJTPA NORTH JERSEY TRANSPORTATION PLANNING AUTHORITY

SUSTAINABLE JERSEY CERTIFIED

RUTGERS–NEW BRUNSWICK Edward J. Bloustein School of Planning and Public Policy Alan M. Voorhees Transportation Center

Main Street Walking Audit
Readington, NJ

August 12, 2024

This effort is part of the Complete Streets Technical Assistance Program, a collaboration between Sustainable Jersey, the Voorhees Transportation Center at Rutgers University, and the North Jersey Transportation Planning Authority (NJTPA). Funded by the NJTPA, the program is designed to support municipal government efforts to advance Complete Streets initiatives.

WALKING EXPERIENCE

Street Segment 1: Main Street between Bank Street and Railroad Avenue

Please indicate how much you agree with the following statements:

1 = Disagree 2 = Somewhat Disagree 3 = Somewhat Agree 4 = Agree

	1	2	3	4
1. Now and historically, motorists are respectful of my presence (yield to me at intersections, drive at a safe speed, look before turning or exiting a driveway, etc.).				
Notes:				
2. I feel visible and safe from crime while walking along this segment.				
Notes:				
3. The street is friendly and inclusive to people walking of all ages and physical abilities; sidewalks are well-maintained, smooth, and wide enough to walk comfortably alongside another person.				
Notes:				
4. Intersection design elements (ADA accessible curb ramps, pedestrian signals, well-marked crosswalks, curb extensions, etc.) are all present and make me feel safe while approaching and crossing the intersection.				
Notes:				
5. The street includes consistent tree coverage, attractive landscaping, interesting/important destinations, and a consistent and interesting mix of buildings fronts (porches, windows, stoops, etc.) to invite walking.				
Notes:				
6. Amenities for a wide number of street users are available (bike racks, public seating, etc.) and are comfortable to use.				
Notes:				

Total Score:

NAME & EMAIL: _____

WALKING EXPERIENCE

Street Segment 2: Main Street between Railroad Avenue and Nelson Street

Please indicate how much you agree with the following statements:

1 = Disagree 2 = Somewhat Disagree 3 = Somewhat Agree 4 = Agree

	1	2	3	4
1. Now and historically, motorists are respectful of my presence (yield to me at intersections, drive at a safe speed, look before turning or exiting a driveway, etc.).				
Notes:				
2. I feel visible and safe from crime while walking along this segment.				
Notes:				
3. The street is friendly and inclusive to people walking of all ages and physical abilities; sidewalks are well-maintained, smooth, and wide enough to walk comfortably alongside another person.				
Notes:				
4. Intersection design elements (ADA accessible curb ramps, pedestrian signals, well-marked crosswalks, curb extensions, etc.) are all present and make me feel safe while approaching and crossing the intersection.				
Notes:				
5. The street includes consistent tree coverage, attractive landscaping, interesting/ important destinations, and a consistent and interesting mix of buildings fronts (porches, windows, stoops, etc.) to invite walking.				
Notes:				
6. Amenities for a wide number of street users are available (bike racks, public seating, etc.) and are comfortable to use.				
Notes:				

Total Score:

NAME & EMAIL: _____

WALKING EXPERIENCE

Street Segment 3: Main Street between Nelson Street and White House Mall Driveway

Please indicate how much you agree with the following statements:

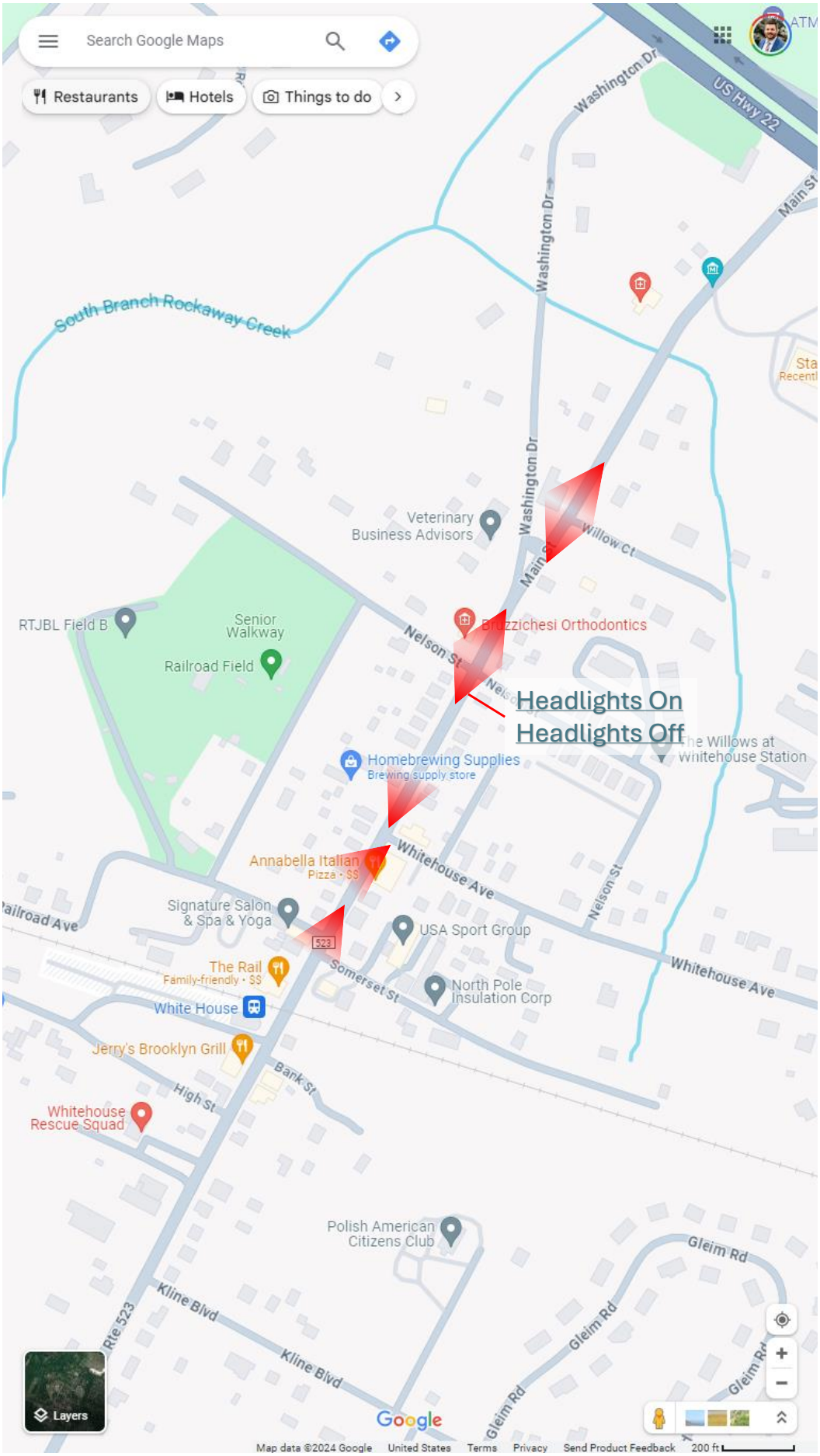
1 = Disagree 2 = Somewhat Disagree 3 = Somewhat Agree 4 = Agree

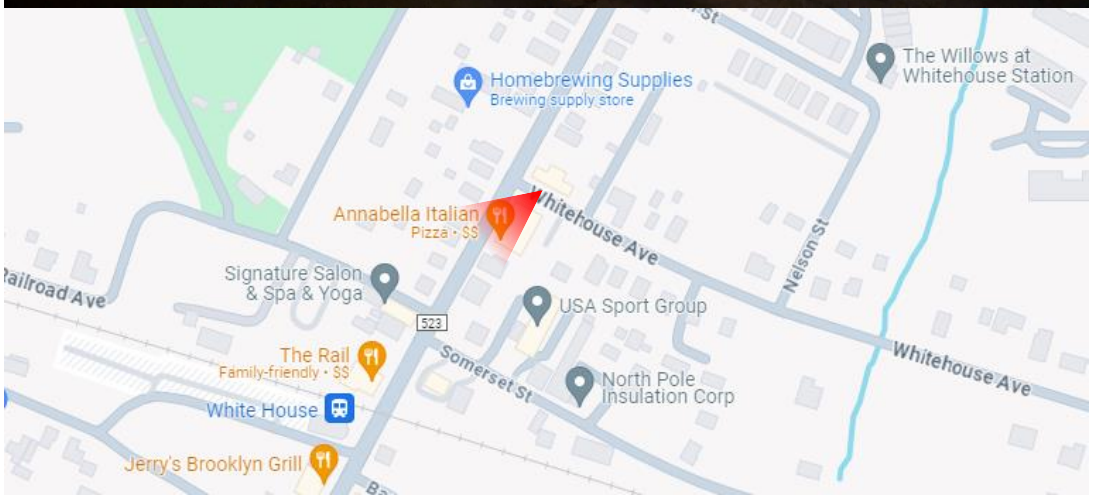
	1	2	3	4
1. Now and historically, motorists are respectful of my presence (yield to me at intersections, drive at a safe speed, look before turning or exiting a driveway, etc.).				
Notes:				
2. I feel visible and safe from crime while walking along this segment.				
Notes:				
3. The street is friendly and inclusive to people walking of all ages and physical abilities; sidewalks are well-maintained, smooth, and wide enough to walk comfortably alongside another person.				
Notes:				
4. Intersection design elements (ADA accessible curb ramps, pedestrian signals, well-marked crosswalks, curb extensions, etc.) are all present and make me feel safe while approaching and crossing the intersection.				
Notes:				
5. The street includes consistent tree coverage, attractive landscaping, interesting/important destinations, and a consistent and interesting mix of buildings fronts (porches, windows, stoops, etc.) to invite walking.				
Notes:				
6. Amenities for a wide number of street users are available (bike racks, public seating, etc.) and are comfortable to use.				
Notes:				

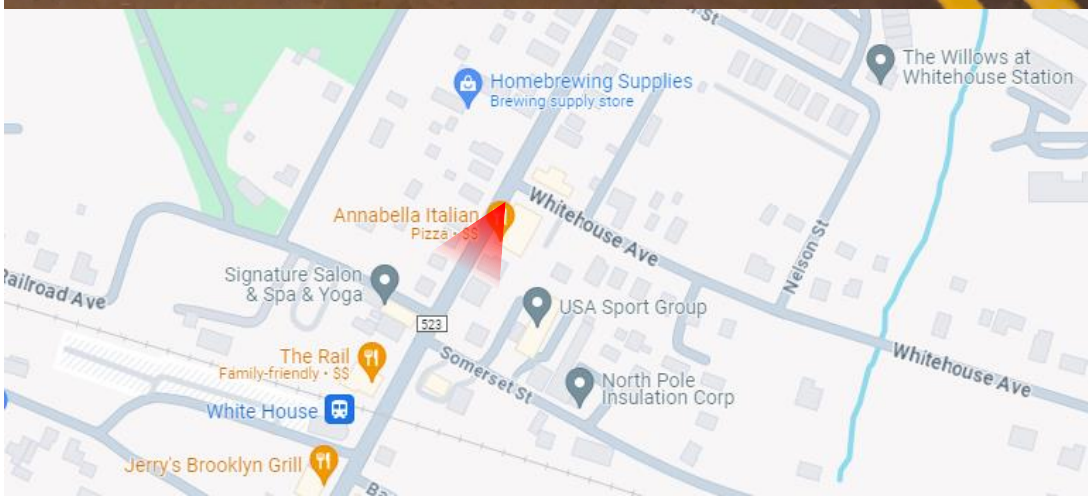
Total Score:

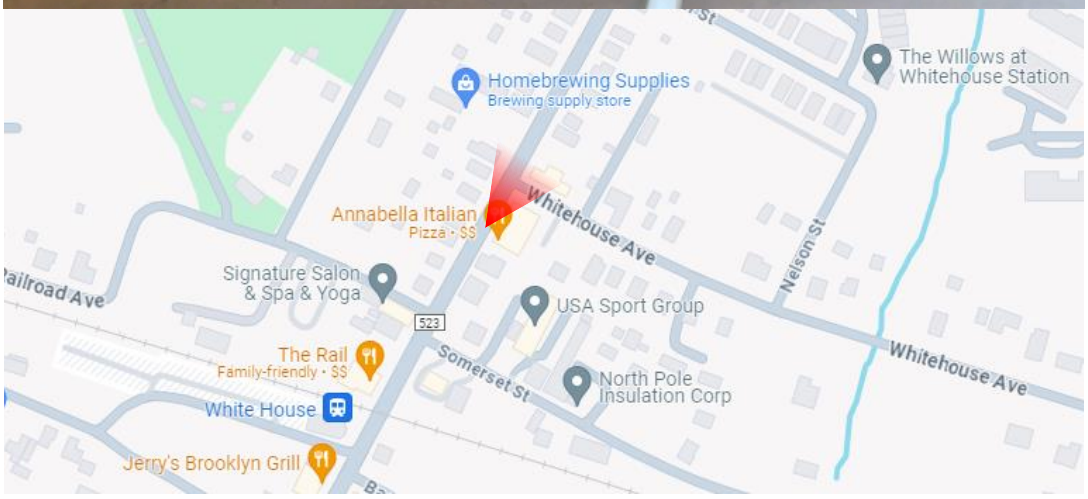
NAME & EMAIL: _____

E. Nighttime View of Main Street

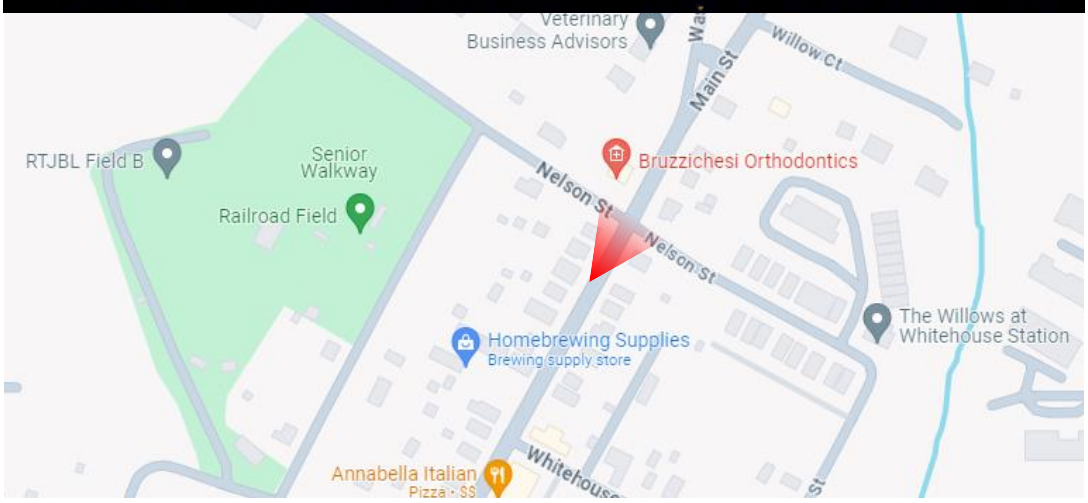



Homebrewing Supplies
Brewing supply store
The Willows at Whitehouse Station
Annabella Italian
Pizza · $$
Whitehouse Ave
Nelson St
Signature Salon & Spa & Yoga
USA Sport Group
523
The Rail
Family-friendly · $$
Somerset St
North Pole Insulation Corp
Whitehouse Ave
White House
Jerry's Brooklyn Grill

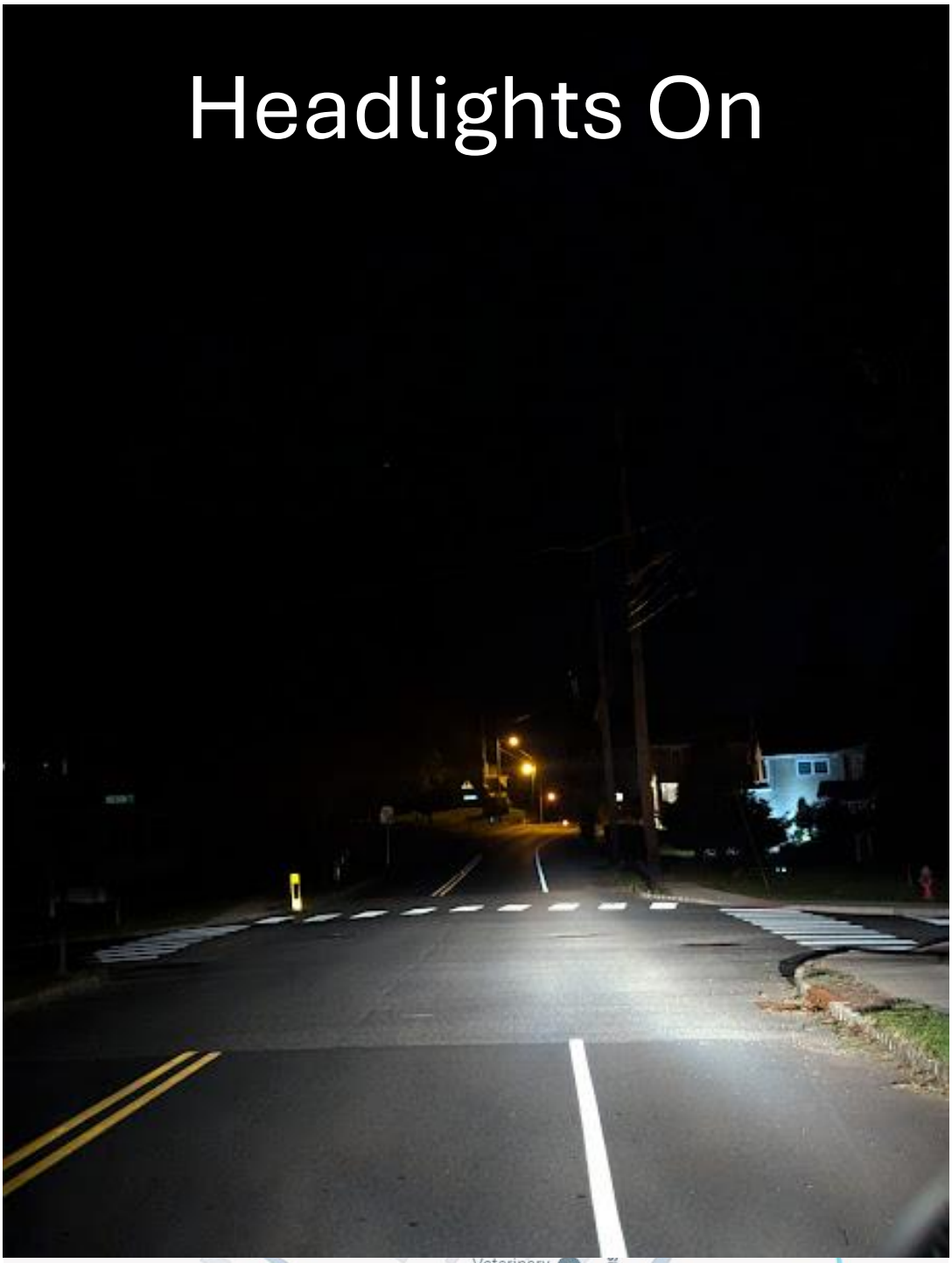

Homebrewing Supplies
Brewing supply store
The Willows at Whitehouse Station
Annabella Italian
Pizza · $$
Whitehouse Ave
Nelson St
Signature Salon & Spa & Yoga
USA Sport Group
523
The Rail
Family-friendly · $$
Somerset St
North Pole Insulation Corp
Whitehouse Ave
White House
Jerry's Brooklyn Grill

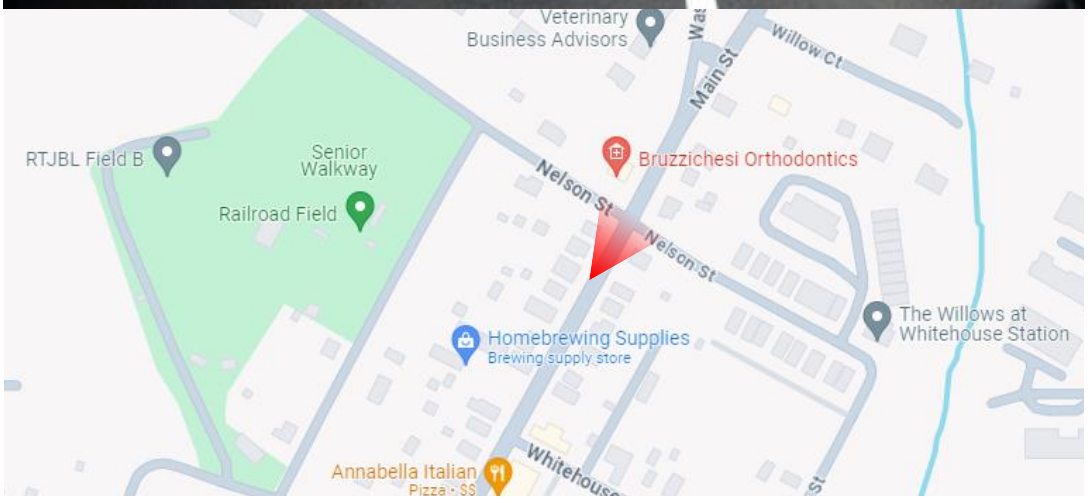

Homebrewing Supplies
Brewing supply store
The Willows at Whitehouse Station
Annabella Italian
Pizza · $$
Whitehouse Ave
Nelson St
Signature Salon & Spa & Yoga
USA Sport Group
523
The Rail
Family-friendly · $$
Somerset St
North Pole Insulation Corp
Whitehouse Ave
White House
Jerry's Brooklyn Grill

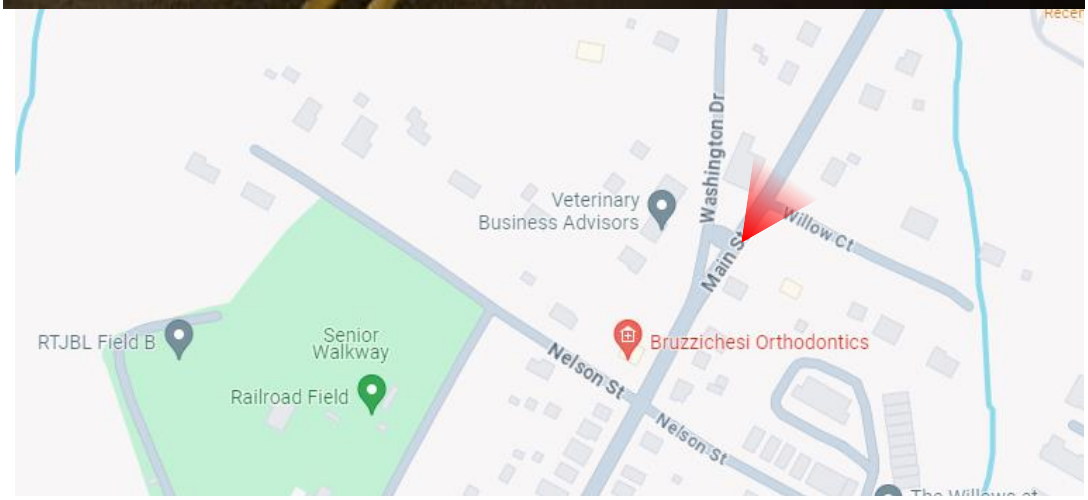
Headlights Off

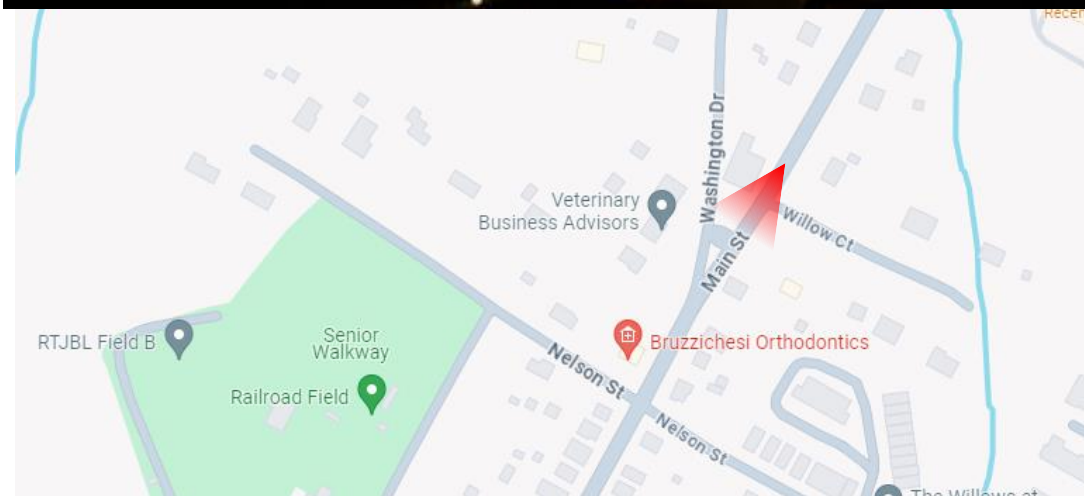


Headlights On






Veterinary
Business Advisors
Washington Dr
Willow Ct
Bruzzichesi Orthodontics
RTJBL Field B
Senior
Walkway
Railroad Field
Nelson St
Nelson St


Veterinary
Business Advisors
Washington Dr
Main St
Willow Ct
RTJBL Field B
Senior
Walkway
Railroad Field
Bruzzichesi Orthodontics
Nelson St
Nelson St

Headlights Off