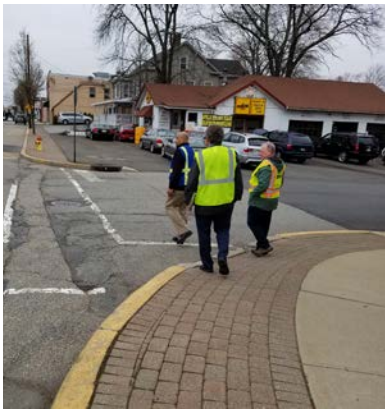
North Beverwyck Road Walkable Community Workshop

Parsippany-Troy Hills Township, Morris County, NJ

2019



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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 United States Government assumes no liability for its contents or its use thereof.

The report was authored by staff at the Alan M. Voorhees Transportation Center (VTC) at Rutgers, The State University of New Jersey, and reviewed by Sustainable Jersey, the NJTPA, and officials from the Township of Parsippany-Troy Hills..

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The Alan M. Voorhees Transportation Center 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.

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Sustainable Jersey
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Acknowledgments

The authors of this report would like to extend special thanks to the following individuals for making this workshop possible: Mayor Michael Soriano, Matt Clarkin, Chief of Staff, and Ellen Sandman, Business Administrator. The team would also like to thank all those who participated and provided valuable insights during the walk audit. Lastly, the team would like to thank Rutgers graduate students Qingyang Xie, Aishwarya Shrestha, and Anish Grover for assisting in the preparation of this report.

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**

This report includes a number of recommendations to improve walkability along the North Beverwyck Road business district in the Lake Hiawatha neighborhood of the Township of Parsippany-Troy Hills, New Jersey. The most significant obstacles to walkability in the study area are the long distances between crosswalks, narrow sidewalks, and a lack of Americans with Disabilities Act (ADA) compliance. Unfortunately, the long distances between crosswalks result in pedestrians crossing wide vehicular travel lanes at unsafe locations. This report recommends the installation of temporary mid-block crosswalks, sidewalk extensions and/or parklets to provide additional locations for a safe crossing, slow vehicle speeds, and increase safety. The long-term recommendation is to install permanent curb extensions and a center median in the road at key locations. The report also recommends adding high-visibility crosswalks, updated roadway signage, overall enhancement and brand identity of the downtown area, and evaluation of the potential for the installation of green infrastructure to assist with both stormwater management and traffic calming.

The Township of Parsippany-Troy Hills submitted an application to the NJTPA's competitive Complete Streets Technical Assistance grant program in 2018. The township was one of nine communities selected out of 17 applications to receive up to $10,000 in technical assistance. Parsippany-Troy Hills requested a Walkable Community Workshop (WCW) to explore the benefits of complete streets and develop strategies for making streets safer for the most vulnerable users — pedestrians and cyclists.

The half-day workshop was held on April 9, 2019. Staff from the Alan M. Voorhees Transportation Center (VTC) at Rutgers, The State University of New Jersey led the workshop with support from Sustainable Jersey (SJ) and the North Jersey Transportation Planning Authority (NJTPA). It was conducted in two parts: an hour-long classroom-style training at the Lake Hiawatha Public Library, and an on-site walking audit along North Beverwyck Road between Chesapeake Avenue and Claudine Terrace.

North Beverwyck Road is located in the Lake Hiawatha neighborhood of the Township of Parsippany-Troy Hills. Lake Hiawatha is one of 11 neighborhoods in the township and is located in the northeastern portion of the municipality. The character of North Beverwyck Road is mostly commercial throughout the study area, with some apartment homes interspersed throughout. The road provides the main north-south connection in the Lake Hiawatha neighborhood. The corridor is described by municipal officials as the "only true downtown" in the municipality but they also note that the corridor's lack of walkability holds the area back from its full commercial potential.

Figure 1. North Beverwyck Road at the intersection of Hiawatha Boulevard, looking southward, during the audit.

The lessons learned during the half-day workshop can be applied to other municipal-owned roadways in Parsippany-Troy Hills. The field audit form can be found in this report's appendices and can be repurposed for walk audits in other corridors within the borough. Another resource the NJTPA offers communities is Street Smart NJ, a pedestrian safety campaign that works to raise awareness of New Jersey's pedestrian-related laws and change the behaviors that contribute to pedestrian-vehicle crashes. Additional Street Smart NJ information and a list of potential funding resources are also provided in the appendices of this report.

Background

The North Jersey Transportation Planning Authority (NJTPA) created the Complete Streets Technical Assistance (CSTA) Program in 2018 to assist municipalities in advancing or implementing complete streets, which was a need identified through the Together North Jersey consortium. Sustainable Jersey (SJ) and the Alan M. Voorhees Transportation Center (VTC) at Rutgers University were retained to provide technical assistance for this program. The CSTA Program was designed to support nine municipal governments seeking to implement complete streets in their communities. Municipalities were selected for the program based on the following criteria: the need for technical assistance, commitment to implementation, stakeholder support, and the strength of the municipal team.

In March 2019, the CSTA Project Team worked with municipal officials to identify a corridor for the workshop (see "Walking Audit Location" section). The group selected North Beverwyck Road, which has many characteristics of a small town main street— a variety of local stores and restaurants, pedestrian lighting, brick pavers, and street trees — but lacks some of the necessary ingredients for a vibrant walkable downtown. In its application to the CSTA Program, the Township of Parsippany-Troy Hills expressed interest in identifying complete street improvements along the corridor that would generate foot traffic for the local businesses. Many of Lake Hiawatha's residents are within walking distance of the shops, restaurants, and other vital services located along North Beverwyck Road. However, the economic vitality of the area is compromised due to the overall lack of access and connectivity via sidewalks for residents and visitors to the area.

The current administration desires to identify projects to improve walkability in order to enhance the downtown's identity and promote economic revitalization. Officials stated that North Beverwyck Road has historical significance with ties to the Revolutionary War, and the township is currently working towards incorporating historic street signage along the route. Additionally, township officials are committed to ensuring any changes along the corridor are informed by input from local residents and business owners.

Stakeholders were invited to participate in the half-day workshop that was held on April 9, 2019. The workshop included a presentation on complete streets, a walkability audit, and a debrief.

What is a Complete Street?

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. Complete streets should be tailored 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 induce a safer setting for students. Meanwhile, streets along transit routes will incorporate the needs of bus and rail commuters by installing benches, shelters, and enhanced lighting and signs.

Regardless of the context, complete 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 be used to create a safer environment for seniors, 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 down to 5 percent at 20 mph (Figure 2 and Figure 3)[1]. Complete streets recognize that users of all transportation modes, whether it be car, bus, train, or taxi, at some point during their journey become a pedestrian. Creating a safer environment benefits everyone.

Figure 2. A complete street, as seen in New Brunswick, New Jersey. No two complete streets are alike, as they should always reflect the context of the street and the character of the community.

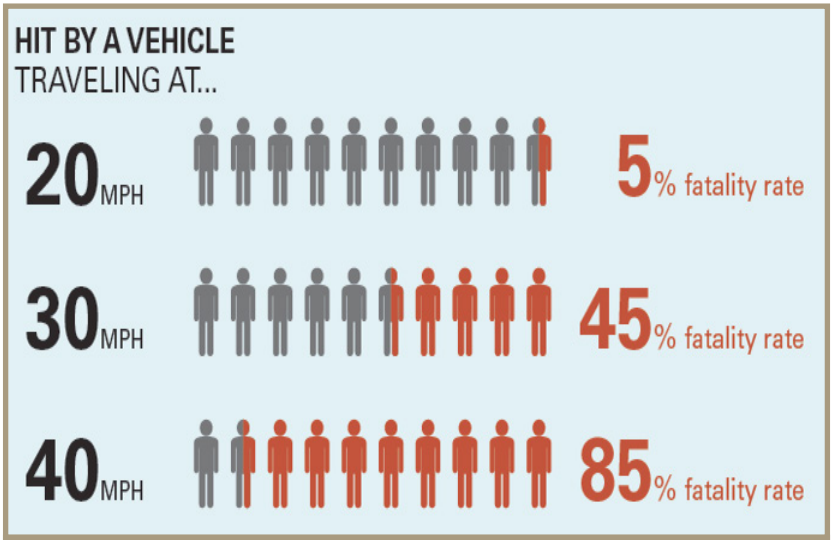


Figure 3. Graphic showing increased fatality rate as vehicle speeds increase.

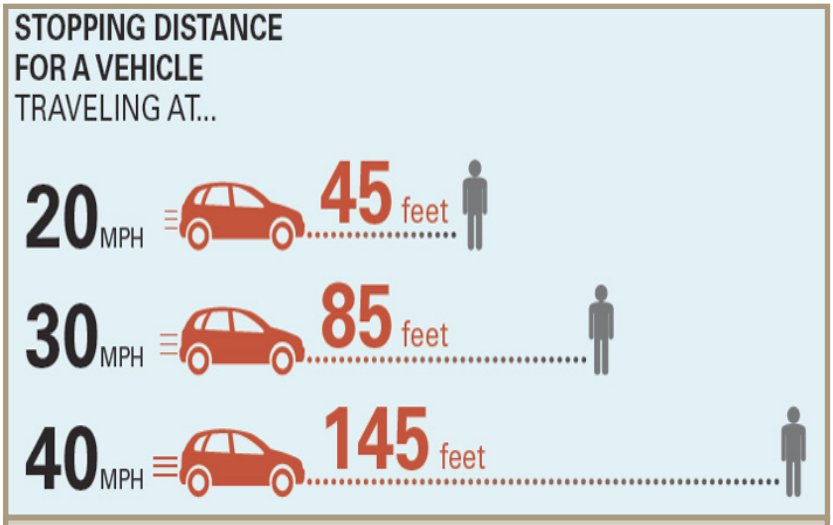


Figure 4. Graphic showing increased stopping distance as vehicle speeds increase.

1. Leaf, William A., and David F. Preusser. 1999. Literature review on vehicle travel speeds and pedestrian injuries. DOT HS 809 021. Washington, DC: U.S. Department of Transportation. http://www.nhtsa.dot.gov/people/injury/research/pub/HS809012.html.

Benefits of Complete Streets

While the primary benefit of complete streets is improved safety for all roadway users, there are other positive outcomes. Complete streets create better places to live, work, and do business. These benefits include mobility, equity, health, quality of life, economic vitality, and environmental health.

Figure 5. When a street lacks accessible sidewalks and ramps, it is not complete.

Figure 6. Division Street in Somerville was converted into a pedestrian plaza that has become a popular gathering space.

Mobility

Creating or enhancing multi-modal transportation options creates mobility opportunities for everyone, including non-drivers, youth, and senior citizens (Figure 5). In turn, increased mobility improves access to jobs and services, which is crucial for people who cannot afford or choose not to own a car, as well as those who are unable to drive due to a disability or their age.

Equity

Complete streets decrease the necessity of the automobile regarding access to opportunity. Transportation costs comprise a significant portion of a household budget, approximately 20 percent in the United States. Much of this is due to the high cost of automobile ownership, including insurance, fuel, maintenance, registration fees, and financing. However, household transportation costs drop to just 9 percent in communities with improved street connectivity and accommodations for other modes.[2] Connected communities allow residents to use less energy and spend less money to get around, allowing for fewer car trips and the use of other less expensive modes of transportation like bicycling, walking, or public transit. Providing a variety of transportation choices across different price points allows families to free up more money for housing or other needs.

Health

Complete streets enhance opportunities for increased walking and bicycling which in turn leads to the numerous health benefits associated with increased physical activity. The Center for Disease Control (CDC) supports complete streets as a means to prevent obesity.

Quality of Life

Livable, walkable communities diminish the need for automobiles. Walking or bicycling around town creates a sociable environment, fostering interactions between family, friends, or clients and increasing community involvement. These interactions, in turn, entice users to enjoy the surroundings they would otherwise ignore in a car. A reduction in vehicle use can also increase the quality of life thanks to reductions in noise and stress associated with congestion and crashes.

Economic Vitality

Improving streetscapes revitalizes 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 that they may have driven past before. Such is the experience in Somerville, New Jersey, where one block of Division Street was converted to a pedestrian plaza. The area

2. U.S. Department of Transportation (January 3, 2014), "Transportation and Housing Costs," Livability Initiative, https://www.fhwa.dot.gov/livability/fact_sheets/transand¬housing.cfm#foot1.

witnessed a sharp decline in vacant commercial properties; vacancy dropped from 50 percent to zero after the plaza was developed [3].

Environmental Health

By reducing automobile use, complete streets can contribute to cleaner air. Additional sustainable design elements installed along complete streets can also bring other environmental benefits. For example, landscape improvements (green streets) can reduce impervious cover, reduce or filter stormwater runoff, and contribute to water quality improvement.

Complete Streets in New Jersey and Parsippany-Troy Hills

New Jersey is a leader in the complete streets movement. In 2009, the New Jersey Department of Transportation (NJDOT) was among the first state DOTs in the nation to adopt an internal complete streets policy. In 2010, the National Complete Streets Coalition ranked NJDOT's complete streets policy first among 210 state, regional, county, and municipal policies nationwide. 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, 153 municipalities have implemented complete streets policies affecting 3.8 million (44 percent) of the state's residents.[4] Currently, both Morris County and the Township of Parsippany-Troy Hills lack complete streets policies.

3. "Complete Streets Case Study: Somerville, New Jersey," Alan M. Voorhees Transportation Center, 2016.
4. New Jersey Bicycle and Pedestrian Resource Center, "NJ Complete Streets Policy Atlas," 2018. http://njbikeped.org/complete-streets-2/.

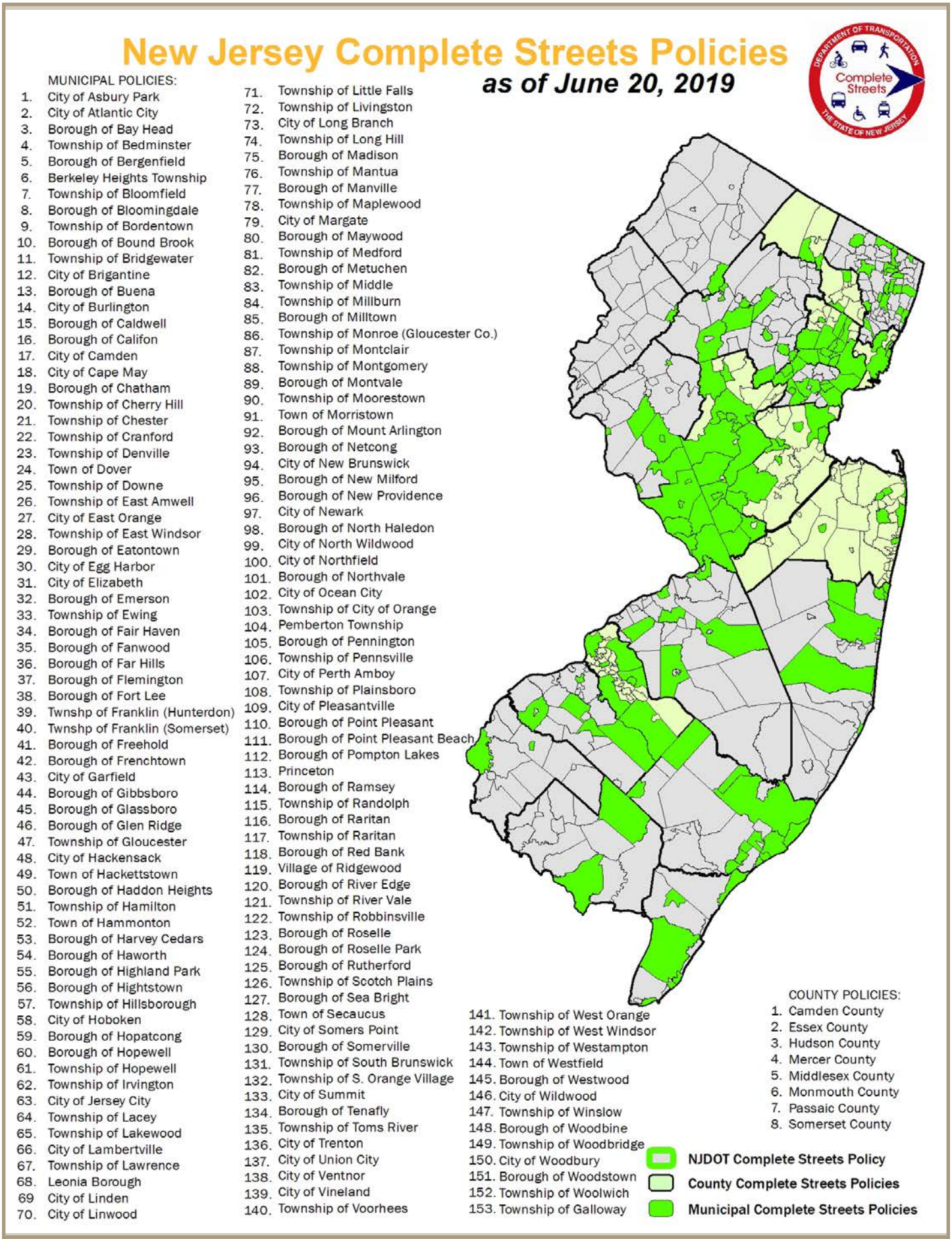


Figure 7. Complete Streets Policies in New Jersey, as of March 18, 2019.

Walking Audit Location

The Township of Parsippany-Troy Hills, New Jersey is home to approximately 53,444 residents and occupies an area of 23.5 square miles. The median age is 41.2 years old and 55 percent of residents have a college degree. The community enjoys a 62 percent homeownership rate, with an estimated median household income of $93,915. The Lake Hiawatha neighborhood is just one of 11 neighborhoods in Parsippany-Troy Hills Township (US Census Bureau, 2017).

The study corridor consists of North Beverwyck Road from Chesapeake Avenue in the north to Claudine Terrace in the south (Figure 8). North Beverwyck Road is a two-lane municipal roadway, which is the principal collector serving the residential streets of Lake Hiawatha. Within the study corridor, North Beverwyck is lined with commercial uses, consisting of locally-oriented services and retail. Several larger commercial facilities, including a grocery store and shopping plaza, are located at the southern end of the study corridor. The road bisects the Lake Hiawatha neighborhood and connects with US Route 46 and Interstate 80 to the south. Lake Hiawatha consists mainly of single-family homes and apartments, including a large apartment complex just outside the study corridor to the north. The Lake Hiawatha Fire Department is also located along the study corridor. The Lake Hiawatha Free Public Library is one block to the east of the study corridor on Hiawatha Boulevard.

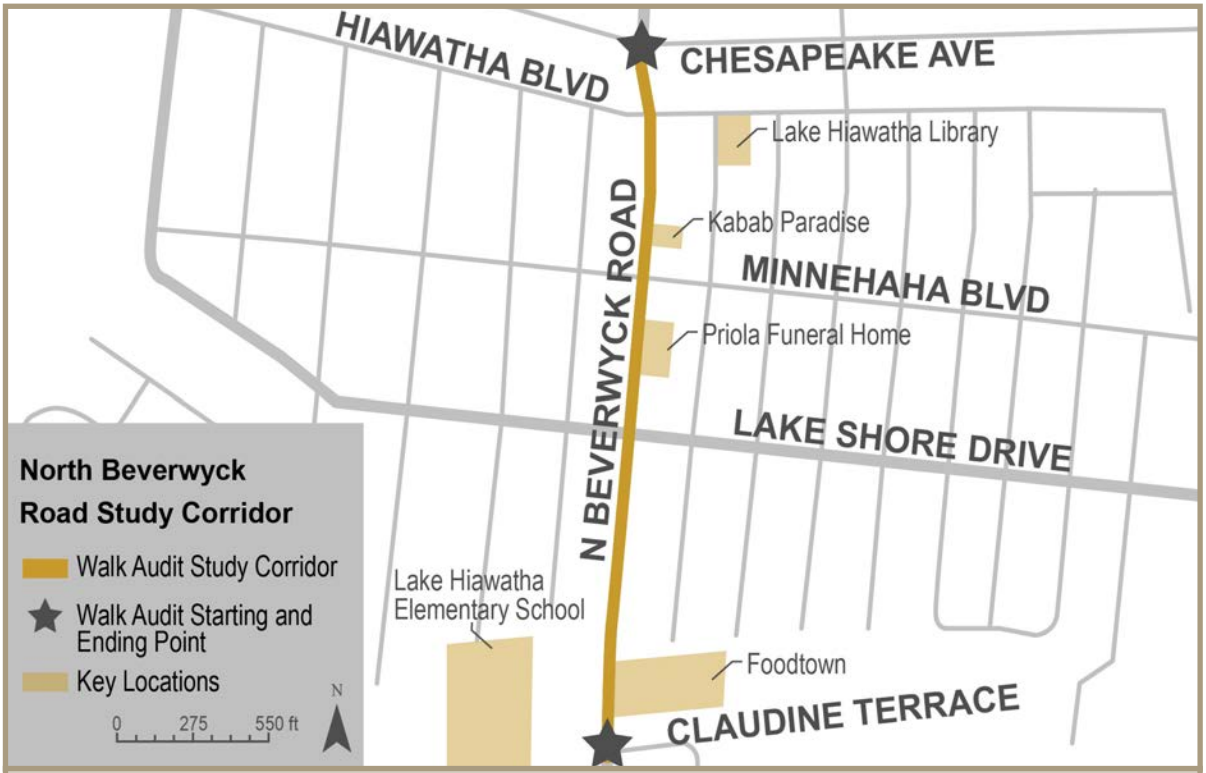


Figure 8. North Beverwyck Road Study Corridor.

Several NJ TRANSIT bus stops are located along the corridor with direct weekday service to Newark Penn Station and connections to New York City. Free municipal parking is available at the intersection of North Beverwyck Road and Minnehaha Boulevard. During the audit, the CSTA Project Team noted the frequent use as well as arrival and departure of buses at the North Beverwyck Road bus stops.

Three Parsippany-Troy Hills public schools are located near North Beverwyck Road. While the township does provide bus service, it is limited to students living more than 1.2 miles away from an elementary school and more than 2.5 miles away from the high school. Knollwood Elementary is approximately one mile west of the intersection of Minnehaha Boulevard and North Beverwyck Road. Lake Hiawatha Elementary is located just behind the strip mall across from Foodtown and is less than one-half mile from the intersection of North Beverwyck Road and Lake Shore Drive. Lastly, Parsippany-Troy Hills High School is located approximately three-quarters of a mile southwest of the intersection of North Beverwyck Road and Claudine Terrace.

Students within walking distance, whose route includes a road deemed hazardous by the Parsippany-Troy Hills Township Board of Education, are provided bus services. The team observed crossing guards positioned along North Beverwyck Road, so it is assumed that some students are walking to school. While the schools' exact areas and service populations are unknown, it is assumed that a portion of the students living east of North Beverwyck Road are expected to cross the corridor as a pedestrian to reach their respective school.

Assessment of Need

While sidewalks are available throughout much of the corridor, there is a clear need to improve the pedestrian experience along North Beverwyck Road. Walk audit participants noted people walk or ride their bicycles along the neighboring roads and enter the food store parking lot from the back, in order to avoid North Beverwyck Road.

Sidewalk quality and width vary throughout the corridor from wide and well-maintained to narrow, sloping, or uneven in places. Numerous tree wells along North Beverwyck Road are empty, uncovered, and/or encroaching on the usable sidewalk area. Additionally, much of the stretch from Claudine Terrace to Lake Shore Drive is dominated by commercial driveways, parking lots, and sloping or insufficient sidewalks. In some instances, sidewalks do not continue across the commercial driveways which makes walking unappealing. The sidewalks terminate south of Claudine Terrace on the northbound side of North Beverwyck Road.

Sidewalk connectivity with surrounding areas is also an issue along the corridor. The street network in the residential areas surrounding North Beverwyck Road provides a well-connected grid pattern which should support walking by creating short routes between destinations. However, many of these streets do not have sidewalks. While these roads were not included as part of the study area, it is important to understand the various ways in which local pedestrians can reach the downtown area.

There are marked pedestrian crossings across North Beverwyck Road and intersecting streets at the intersections, but many crosswalk markings are faded and they are far apart due to large block sizes. Most of the sidewalk ramps are not ADA compliant. Pedestrian scale lighting is present but limited throughout most of the corridor.

A traffic study was not available for the corridor, but WCW participants did note the general traffic experience along the corridor. According to participants, North Beverwyck Road witnesses moderate traffic volumes during most of the week, but traffic increases significantly on Friday and Saturday evenings due to the numerous dining establishments located along the corridor. Kabab Paradise, a popular restaurant, and the Stephen J. Priola Parsippany Funeral Home generate high volumes of traffic at times, according to WCW participants. A southbound tractor-trailer tanker was observed crossing over the center lane striping near Hiawatha Boulevard to maintain speed while traveling through the corridor.

Data

Traffic and Speed

Traffic volume and speed data are not available for North Beverwyck Road; however municipal officials and WCW participants provided local knowledge regarding common traffic patterns. The speed limit is 25 mph throughout the corridor, though the limit increases to 35 mph just beyond the corridor in either direction. WCW participants, including a local police officer, noted that speeding is common at the southern end of the corridor as the speed limit reduces to 25 mph near a large hill. For traffic traveling south on North Beverwyck Road, the 25 mph speed limit begins at Mara Road, several blocks north of the starting point for the study corridor at Chesapeake Avenue Mara Road is also the location where the speed limits transitions to 35 mph for the traffic heading north. It is unclear if speeding is as common along this portion of the corridor. Participants also noted that the width of North Beverwyck Road allows for unsafe and illegal U-turns throughout the corridor.

WCW participants noted that much of the traffic on North Beverwyck Road comprises vehicles that are neither

starting from nor stopping in the neighborhood. Several businesses along the corridor were identified as traffic generators. As mentioned earlier, the Kabab Paradise restaurant located between Hiawatha Boulevard and Minnehaha Boulevard (Figure 8) attracts a high volume of traffic at peak times, particularly during the night and on weekends. During these times, parking overflows from the restaurant's parking lot to nearby streets and parking areas, including the municipal lot located at the intersection of Minnehaha Boulevard and North Beverwyck Road. The Stephen J. Priola Funeral Home also sometimes generates more traffic than can be accommodated in its parking lot. Both establishments are located midblock and attract a lot of pedestrians who cross outside of a designated crosswalk.

Crash History

During the five-year period of 2014-2018, there were three crashes involving pedestrians and one crash involving a bicyclist within the North Beverwyck Road study corridor (Table 1 and Figure 9). Two of the pedestrian crashes occurred within or near the intersection with Minnehaha Boulevard, and one occurred within the intersection with Chesapeake Avenue. The crash involving a bicyclist occurred at the intersection with Hiawatha Boulevard.

Table 1. Pedestrian and bicycle crashes along North Beverwyck Road, 2014-2018.

Location	Date	Time	Crash Type	Pedestrian Age	Pedestrian Gender	Severity	Intersection	Lighting
North Beverwyck Road and Chesapeake Ave	8/30/2017	15:31	Pedestrian	N/A	N/A	No Apparent Injury	Yes	Daylight
North Beverwyck Road and Minnehaha Boulevard	8/17/2015	12:10	Pedestrian	51	Female	Possible Injury	No	Daylight
North Beverwyck Road and Minnehaha Boulevard	4/29/2016	12:21	Pedestrian	67	N/A	Possible Injury	Yes	Daylight
North Beverwyck Road and Hiawatha Boulevard	7/15/2016	16:10	Pedalcyclist	37	Female	Possible Injury	No	Daylight

Figure 9. Map showing number and location of crashes along the study corridor, 2014-2018.

Workshop Methodology

Prior to conducting the workshop, the CSTA Project Team visited Parsippany-Troy Hills and observed the study area to gain a better understanding of the roads, their location, use, and appropriateness for a walk audit. The municipal team was responsible for selecting a group of stakeholders to attend the workshop. Workshop participants included local residents, elected officials, municipal employees, Morris County transportation planners, and representatives of the TransOptions Transportation Management Association (TMA).

The WCW included a one-hour presentation on the fundamentals of complete streets and best practices concerning pedestrian 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 explained various traffic engineering techniques to accommodate bicyclists and pedestrians and proven measures to reduce speeding.

Following the indoor presentation, participants were outfitted with safety vests, clipboards, and audit forms. Two groups audited both sides of the study corridor, beginning at the intersection of Hillcrest Avenue and North Avenue and continuing west along North Avenue to Prospect Street. The audit consisted of discussing issues, writing observations and taking photographs related to the existing conditions witnessed by participants (Figure 10 and Figure 11). A post-audit debrief was conducted for the two teams to discuss the most important findings and potential recommendations for improvements.

Figure 10. WCW presentation at the Lake Hiawatha Library.

Figure 11. Participants beginning the walk audit, looking south on North Beverwyck Road.

Workshop Findings and Potential Considerations

This section highlights the existing conditions of the study corridor that were identified during the walk audit. It begins with corridor-wide commonalities of the study area, including sidewalks, intersections, safety, and comfort. This is followed by a detailed description of conditions along the route.

Figure 12. An uncovered tree well takes up most of the usable sidewalk space and uneven pavers create a hazard, looking northward on North Beverywyck Road, south of Lake Shore Drive.

Figure 13. Narrow and cluttered sidewalk, looking northward on North Beverwyck Road.

Figure 14. Missing sidewalks in front of Foodtown, looking south on North Berverywyck Road.

Corridor Summary

Sidewalks

Though sidewalks are available throughout the corridor, there are many locations where the usable sidewalk space is of poor quality. The sidewalks comprise a mixture of concrete areas and pavers, and the pavers are generally uneven. Additionally, usable sidewalk space is limited by the presence of large empty or uncovered tree wells in various locations along the route (Figure 12). Sidewalk widths vary greatly along the corridor, from wide and accommodating at the northern end of the corridor, to narrow and cluttered (Figure 13), to non-existent in front of some of the larger commercial properties (Figure 14).

Even in areas with wide sidewalks, there is little to no buffer between passing vehicular traffic and pedestrians walking on the sidewalk. While the speed limit is a pedestrian-friendly 25 mph along the corridor, it often feels like cars are going much faster due to this lack of protection. At multiple locations, the sidewalk slopes towards the street creating a hazard for seniors and persons with disabilities. The New Jersey Complete Streets Design Guide states that a 5-foot minimum width is required to meet accessibility standards, but sidewalks should be constructed as wide as possible to accommodate pedestrian demand. Additionally, the guide states a planted buffer or furnishing zone should be a minimum of 2.5 feet wide to provide comfort and protection from traffic (Figure 15).

Many of the commercial driveways along the corridor do not safely accommodate pedestrians and instead prioritize vehicular traffic. Sidewalks along North Beverwyck Road are often sloped across driveways or missing entirely (Figure 14). "A continuous and level pedestrian zone" should be provided across driveways, according to the New Jersey Complete Streets Design Guide (Figure 16).

Figure 15. Pedestrian zones, including minimum buffer zone, as depicted in the New Jersey Complete Streets Design Guide.

Intersections and Crosswalks

All of the crosswalks on the corridor are standard parallel crosswalks, with the

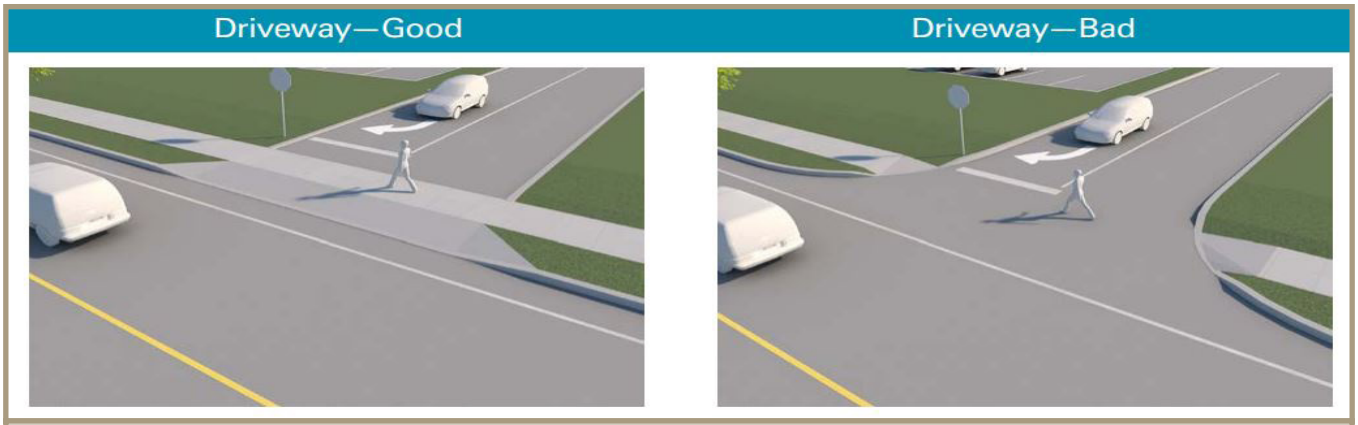


Figure 16. Safe pedestrian accommodations across driveways, as depicted in the New Jersey Complete Street Design Guide.

exception of Lake Shore Drive, and are largely faded or missing. Standard parallel crosswalks, even when freshly painted, are not as highly visible as alternatives. Additionally, opportunities for pedestrians to cross North Beverwyck Road are limited. The nearest crosswalk south of Lake Shore Drive is nearly one-half mile away. To the north, the crosswalks at Minnehaha Boulevard and Hiawatha Boulevard are each over 500 feet apart. Pedestrian countdown signals are located at both signaled intersections: Lake Shore Drive and Hiawatha Boulevard.

Crosswalks throughout the corridor lack ADA accommodations to varying degrees. At some intersections, such as Minnehaha Boulevard and North Beverwyck Road, some curb ramps are missing entirely. At other intersections, curb ramps are aimed at the center of the intersection rather than into the crosswalk. In many locations, the slope of the ramp is too steep.

Figure 17. Yellow striping indicates "no parking" near the intersection of Hiawatha Boulevard, looking southward on North Beverwyck Road.

Safety

When the corridor was audited at 2 p.m. on a weekday, both vehicular and pedestrian traffic was fairly consistent. Although the study area was not observed at night, the spacing of the light fixtures appears to be too infrequent to provide uniform lighting. Fixtures consist of both overhead cobra lighting and pedestrian-oriented lighting. The New Jersey Complete Streets Design Guide states that, "Street lights should be energy efficient, evenly spaced, and focused downward to reduce light pollution." A nighttime observation would be needed to determine if there is currently a pedestrian visibility problem along the entirety of the route.

Yellow striping demarcates areas where parking is not permitted along the corridor (Figure 17). Each of the intersections and several additional locations along the corridor includes such painting. In many instances, pedestrian safety at crosswalks is improved by ensuring parked vehicles do not block pedestrian visibility. However, during the WCW, vehicles were parked in several of these "no parking" zones.

Comfort and Appeal

Several quality-of-life concerns were observed that could discourage walking or bicycling along the corridor, including litter and unkempt vacant lots. There are some vacant storefronts along the route, including a building used for storage, which enclosed all of the windows with siding. One resident, on his way to the grocery store, approached project staff during the initial site visit to express concerns. The resident noted that snow removal along the sidewalks is inconsistent in the winter and proves hazardous for pedestrians. WCW

participants noted that overhead power lines and excessive signage clutter the downtown. Overall though, an attempt is made to achieve visual appeal with some greenery and pavers, though more frequent maintenance is needed. The area could also benefit from additional pedestrian amenities (e.g., trash receptacles, benches, and water fountains) and streetscaping efforts, especially efforts which highlight the area's downtown identity and create a buffer between pedestrians and moving traffic.

Figure 18. Vacant lot with litter, just south of the Hiawatha Boulevard intersection.

Figure 19. Current conditions, looking south on North Beverwyck Road.

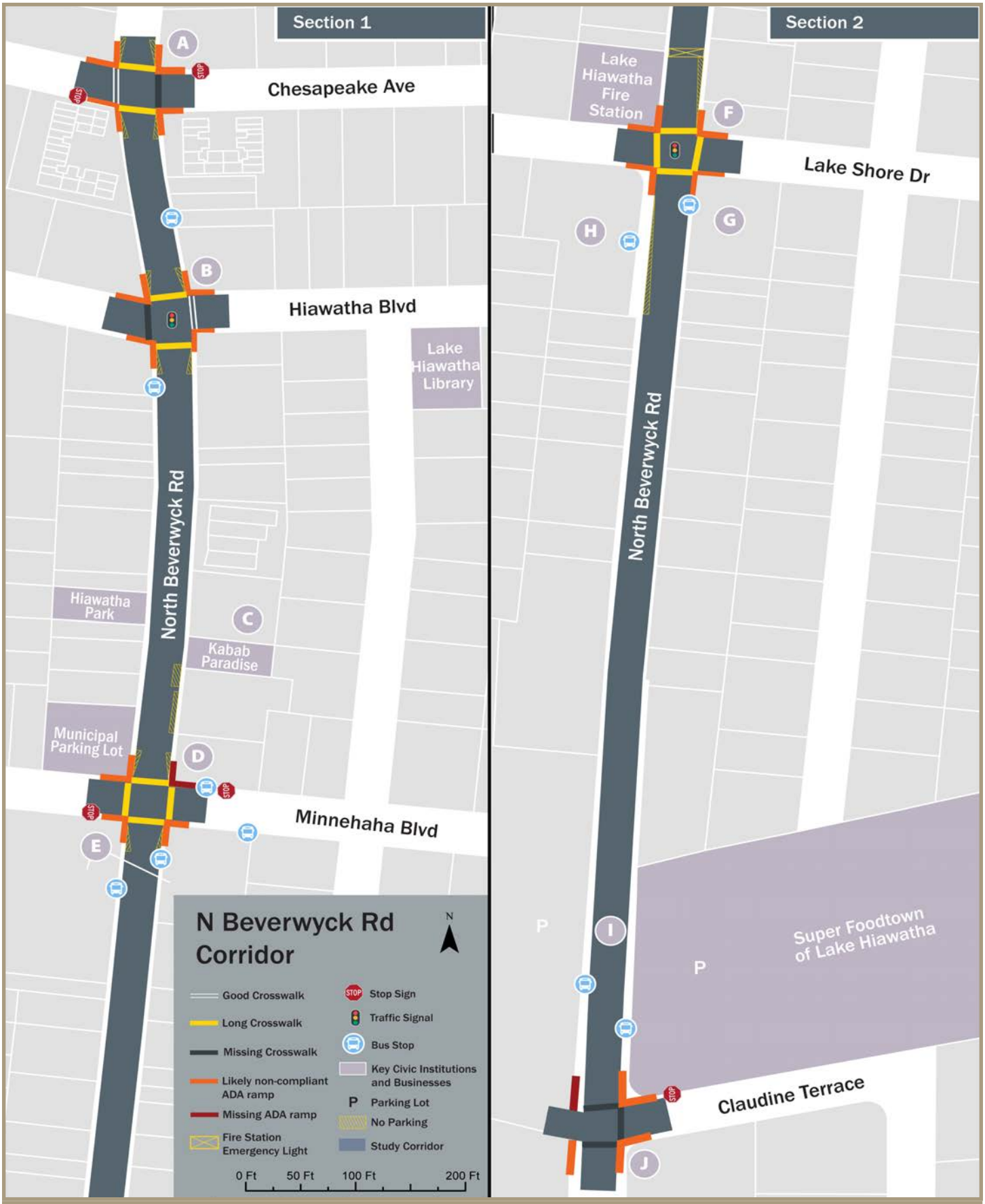


Figure 20. Current conditions of the study corridor.

Detailed Conditions

North Beverwyck Road: Chesapeake Avenue to Minnehaha Boulevard

The study corridor begins at the intersection of North Beverwyck Road and Chesapeake Avenue (Figure 20, Location A). In this area, North Beverwyck Road transitions from a mixture of residences and businesses, to mostly storefronts. The road is approximately 50 feet wide, with one travel lane in each direction and a speed limit of 25 mph. Surface parking lots populate numerous locations throughout the corridor. On-street parking is permitted on both sides of the street, though overnight parking is limited.

Figure 21. The Chesapeake Boulevard intersection, looking northward on North Beverwyck Road.

There is a curve on North Beverwyck Road approaching the Chesapeake Avenue intersection from the north, which limits the visibility of pedestrians in the crosswalk for drivers. No-parking zones are delineated with yellow paint at all four corners of the intersection (Figure 21) which daylights the corners and improves visibility. The Chesapeake Avenue crosswalk on the east side of North Beverwyck Road was paved over and had not been repainted at the time of the walk audit. Additionally, ramps at all four corners of the intersection are likely not ADA compliant, with steep slopes, awkward positioning and raised pavers.

Figure 22. Cluttered sidewalks with hazardously low signage, looking northward on North Beverwyck Road near the intersection of Hiawatha Boulevard.

The sidewalks between Chesapeake Avenue and Hiawatha Boulevard are wide but cluttered with signage (Figure 22) and telephone poles. Large tree wells, some of which are empty, take up a significant portion of the sidewalk (Figure 21). Lighting in the area is provided by a mixture of overhead cobras and pedestrian-scale lights. Pedestrian-scale lights along the route do not direct light down onto the sidewalk and many had clouded lamps which further limits the amount of light provided (Figure 23).

Figure 23. Pedestrian lighting that does not direct light onto the sidewalk, looking southward on North Beverwyck Road near the intersection of Hiawatha Boulevard.

Figure 24. Intersection of North Beverwyck Road and Hiawatha Boulevard, looking southward.

Pedestrian crossing signals with a countdown timer are provided at the lighted intersection of North Beverwyck Road and Hiawatha Boulevard (Figure 20, Location B). During the WCW, crossing guards were located at this intersection to assist school children crossing North Beverwyck Road. The intersection is likely a common crossing spot for students

walking to Knollwood Elementary School. Crosswalks at this intersection are faded and curb ramps display signs of erosion (Figure 24).

WCW participants suggested the signalized intersections along the route could benefit from more modern talking pedestrian signals.

More than 600 feet separates the crosswalks located at the Hiawatha Boulevard and Minnehaha Boulevard intersections (Figure 20, Location B and D, respectively). Along this block, pedestrians commonly cross the street mid-block and outside of the crosswalk to reach popular destinations, such as Kabab Paradise, which draws a significant number of patrons on weekends (Figure 20, Location C).

In this portion of the corridor, storefront pull-in parking creates long crossings across wide driveways with sloped sidewalks along the eastern side of North Beverwyck Road. The sidewalk along the western side of the road, in front of the municipal parking lot, becomes similarly sloped. This section of the sidewalk is also narrower than the rest of the corridor (Figure 25).

Figure 25. Narrow sidewalk near the municipal parking lot, looking southward on North Beverwyck Road toward the Minnehaha Boulevard intersection.

Figure 26. Missing curb ramp and steep, eroded ramp at the intersection of North Beverwyck Road and Minnehaha Boulevard, looking northward.

North Beverwyck Road: Minnehaha Boulevard to Lake Shore Drive

The intersection of North Beverwyck Road and Minnehaha Boulevard is controlled by stop signs located on Minnehaha Boulevard (Figure 20, Location D). On-street parking remains and there is no change in speed limit. A municipal parking lot is located at the northwest corner of the intersection. Banking institutions with their own parking lots are located on both sides of North Beverwyck Road, south of the intersection (Figure 20, Location E). Parking lots are available for most businesses in this section of the corridor.

Faded crosswalks are located at all four crossings, but ramps are missing or deteriorated (Figure 26). ADA ramps are missing entirely from the crosswalks at the northeast corner of the intersection. At the southeast corner, the ramp is extremely steep with raised pavers and crumbling concrete, which creates a hazard.

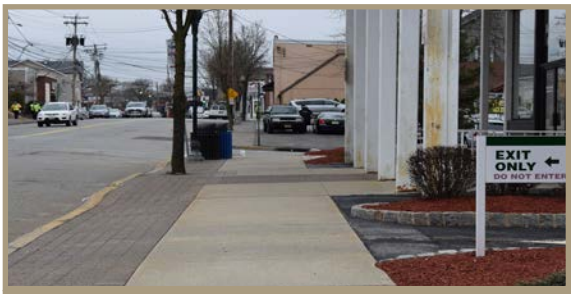


Figure 27. Wide sidewalks, looking northward towards Minnehaha Boulevard.

The sidewalks in front of the banking institutions near the Minnehaha Boulevard intersection are both wide and accommodating (Figure 27). Further south, however, the sidewalks become cluttered and narrow again (Figure 28). Additionally, the sidewalks in this portion of the corridor consistently slope toward the road, rather than providing a level surface which is especially important for pedestrians with mobility devices or strollers. The distance is approximately 600 feet between the Minnehaha Boulevard and Lake Shore Drive crosswalks. WCW participants noted the funeral home is commonly a destination for pedestrians crossing mid-block and outside of the crosswalk.

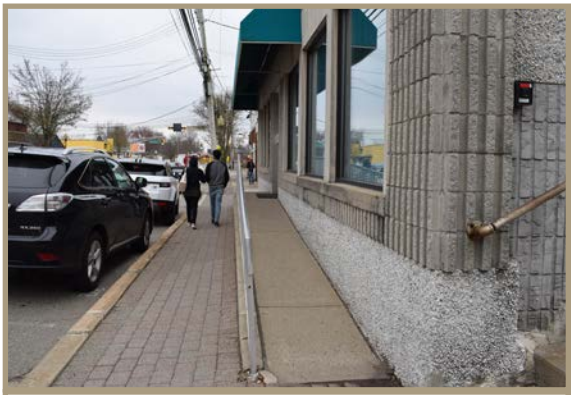


Figure 28. Narrow sidewalks, looking southward on North Beverwyck Road across from the funeral home parking lot.

North Beverwyck Road: Lake Shore Drive to Claudine Terrace

The corridor changes south of the Lake Shore Drive intersection (Figure 20, Location F), with businesses often set back beyond parking lots, and the presence of wide driveways without sidewalk crossings detracting from the area's walkability. Walking infrastructure deteriorates considerably in the southernmost section of the corridor.

Fading ladder crosswalks are installed at the intersection of North Beverwyck Road and Lake Shore Drive (Figure 29). Pedestrian crossing signals with a countdown timer are provided at the signalized intersection of North Beverwyck Road and Lake Shore Drive. During the WCW, school crossing guards were located at this intersection likely to assist students from Lake Hiawatha Elementary School in crossing North Beverwyck Road. At the southwest corner of the intersection, the placement of the pedestrian signal, signal controller box, and telephone pole constrict access to the crosswalk and the ramp (Figure 30). Additionally, this is the southernmost striped crosswalk within the study corridor, with the next available striped crosswalk across North Beverwyck Road located about a one-half mile further south.

Figure 29. Fading crosswalk looking westward across North Beverwyck Road the intersection of Lake Shore Drive.

Figure 30. Access to the only ramp located at the southwest corner of the Lake Shore Drive intersection is constricted by the placement of a traffic signal controller box, pedestrian signal, and telephone pole.

The gas station at the southeast corner of the intersection witnesses a high volume of vehicular traffic that at times blocks the sidewalk for pedestrians (Figure 20, Location G). The 7-Eleven driveway at the southwest corner has different challenges (Figure 20, Location H). Although the narrower driveway limits vehicular traffic to one direction with a single entrance, the driveway entrance, and the curb ramp are offset which creates an angled vehicular entrance that may facility higher vehicle entry speeds and reduce the ability of southbound pedestrians to see southbound turning cars. However, the 7-Eleven parking area offers a good example of providing pedestrian access to the front door, with an internal circulation route for pedestrians clearly delineated using a sidewalk and a crosswalk.

South of these businesses, the sidewalks again become narrow and cluttered (Figure 32). The pedestrian zone along the sidewalk narrowed by trees and overgrown bushes becomes too narrow to use with a wheel chair, stroller, or other mobility device at the southern end of the corridor. Several businesses have

Figure 31. Cluttered sidewalks with uneven pavers, tree well grates, and overgrown bushes, looking south on North Beverwyck Road.

Figure 32. Narrow sidewalk across from the Foodtown shopping center, looking northward on North Beverwyck Road.

storefront parking with wide driveways and sloping sidewalks (Figure 33). The driveway at the entrance to the Foodtown shopping center is 150 feet across and without sidewalks for most of the length (Figure 34, Figure 20, Location I). Additionally, an ADA ramp is missing from the pedestrian island. There are no crosswalks located in this section of the corridor, not even at the intersection of North Beverwyck Road and Claudine Terrace (Figure 20, Location J). During the WCW, participants occasionally witnessed pedestrians crossing outside of designated crosswalks as the nearest crosswalk is located a considerable distance away in either direction (Figure 35).

Figure 33. Wide storefront driveway with sloping sidewalks, looking southward on North Beverwyck Road near Claudine Terrace.

Figure 34. The sidewalk in front of the wide Foodtown shopping center entrance disappears.

Figure 35. Pedestrian crossing outside of a crosswalk, looking southward on North Beverwyck Road.

Recommendations

During the workshop, the community expressed the desire to encourage walking among residents and to improve the safety of those already walking around the neighborhood.

1. Adopt a Complete Streets Policy

Adopting a complete streets policy is an important first step toward implementation of complete streets, as it defines the meaning of complete streets, establishes goals, and lays out the ways in which the municipality will accomplish the goals. The most successful policies state that complete street practices and principles should be a standard part of regular roadway maintenance, planning, and design. An implementation plan and checklist can also be developed to ensure that the municipality remains on the right path year after year. Forming a Complete Streets Advisory Committee could also prove beneficial in promoting implementation. Additionally, points are available to municipalities who are seeking Sustainable Jersey certification for adopting and instituting a complete streets policy. The New Jersey Department of Transportation offers a guide to policy development and a separate guide on how to create an implementation plan. These resources are among those available at http://njbikeped.org/complete-streets-resources/. NJDOT's newly released "Complete and Green Streets for All: Model Complete Streets Policy and Guide" can also be used as a template for a new municipal policy.

Figure 36. Downtown lighting with banners and planters in Union Township, New Jersey. (Photo credit: Arterial LLC)

2. Enhance the Safety and Visual Appeal of the Corridor

According to WCW participants, North Beverwyck Road currently acts mostly as a cut-through for vehicles passing through Lake Hiawatha. There are numerous destinations in the area that would support more pedestrian traffic, including several highly successful businesses, civic institutions, schools, and bus stops. In addition, the area holds historic significance, which township officials are working to promote. North Beverwyck Road has an opportunity to become a destination for visitors and residents alike. Participants saw a number of pedestrians and bicyclists were throughout the corridor. While the area offers many of the amenities of a traditional walkable downtown, the North Beverwyck Road corridor lacks some of the pedestrian amenities and visual cues characteristic of an inviting downtown.

A number of tools are available to help create a sense of place along North Beverwyck Road that would invite road users of all types to stop and enjoy Lake Hiawatha's downtown. Notably, there is no signage to welcome visitors to the downtown. Creating a downtown brand identity for the corridor could include visible signage and pedestrian-oriented lighting. Banners on light posts could combine the two, such as with the light posts in Figure 36 in Union Township, New Jersey, where pedestrian-oriented lighting is combined with planters and a place for hanging banners.

The Union Township image also highlights several additional key aspects of an attractive and safe downtown: wide sidewalks; short, highly visible crosswalks and curb extensions; and greenery. Union Township created a visually appealing and enjoyable downtown along Stuyvesant Avenue by limiting street signs and overhead power lines, and managing clutter overall.

WCW participants noted the inconsistency of the quality and width of sidewalks along the North Beverwyck Road corridor. While some sections offered smooth, wide concrete, others were narrow, in disrepair, or missing altogether.

Additionally, many people were observed crossing mid-block due to the distance between crosswalks. More crossings are needed and they should be shorter so that people feel safe using them. An example of both high visibility midblock crossings and green infrastructure as a buffer between pedestrians and traffic is depicted in Union Township (Figure 37). Pedestrian lighting with banners is also visible in the Morristown downtown, further promoting the area's identity and sense of place.

A business improvement district could be created in order to achieve these goals. Funds could help to maintain pedestrian lighting, planters, and banners that would all help to enhance the area's identity and catch the attention of cars passing through and not only slow them down but also invite them to visit local businesses.

Figure 37. A raised midblock crossing with curb extensions, seating and plantings in Union Township, New Jersey. (Photo credit: Arterial LLC)

3. Improve Crosswalks and Sidewalks

Ensure all crosswalks are highly visible and well-maintained (consider continuing the stamped crosswalks used along North Beverwyck Road just north of the study corridor). Throughout the corridor, crosswalks over North Beverwyck Road are especially long. Curb extensions and pedestrian islands can help to reduce crosswalk length and better accommodate pedestrians (Figure 38). Installing a median throughout sections of the corridor can effectively shorten crosswalks while inhibiting illegal U-turns and providing space for plantings (Figure 39).

Figure 38. Green infrastructure used to narrow the roadway in Philadelphia, PA, also creates a buffer between pedestrians and passing traffic and can be used on curb extensions that shorten the crosswalk distance.

The quality of sidewalks varies throughout the corridor, with substandard conditions caused by missing ADA-compliant curb ramps, walkways narrowed by various objects and uneven pavers. In some places, the sidewalks comprise concrete sections with a border of pavers, in other places sidewalks comprise only pavers. While the pavers can be aesthetically appealing, areas, where they are not well-maintained, can create hazardous conditions. Additionally, pavers do not provide a smooth surface that is optimal for wheelchair users. Consider a maintenance plan to ensure sidewalks are smooth throughout. Sidewalks widths also vary throughout the corridor. Maintain the pedestrian zone along the sidewalks throughout the corridor by paying particular attention to areas where large uncovered tree wells, telephone poles, planters, and stairs encroach on the usable sidewalk space. In locations where the sidewalk is continuously too narrow, consider reallocating road space through a road diet and curb relocation.

Figure 39. A median in Collingswood, New Jersey.

4. Implement Raised Midblock Crosswalks

The corridor would benefit from the installation of additional well-lit crosswalks in areas of high pedestrian

Figure 40. The mid-block crossing in Union Township, New Jersey, is at sidewalk level and provides ADA accommodations. (Photo credit: Arteial LLC)

traffic, particularly in the longer blocks where existing crosswalks are separated by long distances. Raised midblock crosswalks are level with the sidewalk, give priority to pedestrians, and can reduce vehicle speeds. Curb space can be programmed with parklets containing pedestrian amenities such as benches, landscaping and trash cans.

Figure 37 and Figure 40 provide an example of a midblock crosswalk that was recently installed on Stuyvesant Avenue in Union Township, New Jersey. As shown in the photos, the midblock crosswalk is adorned with additional pedestrian amenities such as benches, enhanced lighting, manicured trees and shrubbery, and decorative pavers to compliment sidewalk pavers along the corridor. The crossing is at sidewalk level and provides ADA accommodations.

Figure 41. Bicyclist rides northward along North Beverwyck Road by the Foodtown shopping center.

5. Pilot Raised Mid-Block Crosswalks

Temporary demonstration projects offer an excellent opportunity for the municipality to test out mid-block crossings along the corridor without making significant upfront financial investments. Through a pilot project, the township can use low-cost materials, such as paint, planters, and bollards, to test various locations and garner local support. The township should strongly consider the installation of a temporary demonstration project for a mid-block crosswalk along the corridor. As per NACTO, "designers should study both existing and projected pedestrian volumes in assessing warrants for midblock crossings to account for latent demand."

6. Implement a Road Diet

North Beverwyck Road's wide travel lanes allow for numerous opportunities to increase safety and provide clear visual cues that travelers have entered a historic downtown area. In addition to pedestrian and streetscape improvements, the corridor may benefit from bicycle infrastructure. Multiple bicyclists rode down North Beverwyck Road during the walk audit (Figure 41). Decreasing the width of the travel lanes would provide extra space for pedestrian and/or bicycle infrastructure (Figure 44). This could be achieved by considering the elimination of parking on one side of the street, as surface parking lots are available throughout the corridor and nearby at the Free Public Library. Space could be reallocated for a number of different uses including expanded sidewalks, curb extensions, a separated bicycle lane, green infrastructure, a center median, and/or improved bus stop accommodations.

Figure 42 shows the existing allocation of space on North Beverwyck Road in the downtown area. Figure 43 shows how a road diet with the addition of a center median could provide additional space for pedestrian amenities, such as trees and lighting along the buffer of the sidewalk. The center median, if installed with a width of at least six feet, can facilitate the installation of mid-block crosswalks by providing an island for pedestrians. Alternatively, rather than a median, Figure 44 depicts a bicycle lane between the sidewalk and on-street parking.

7. Install Curb Extensions

Reimagining the use for just a few of the parking spaces along the corridor could provide great improvements for the area's walkability. A curb extension could be used to create a safe highly visible mid-block crossing and to shorten existing crosswalks (Figure 46). They are also useful in areas where the existing sidewalk is not wide enough.

Alternatively, parklets—small public parks—could be installed in locations where one or two on-street parking spaces can be transformed to provide space for pedestrian amenities (Figure 45). Such amenities could include benches, plantings, and lighting or space could be used by a nearby restaurant or business to provide outdoor seating or shopping areas. This option is quite flexible and can be adjusted to meet various needs throughout the corridor. The parklets can be seasonal or permanent. Alternatively, curb extensions

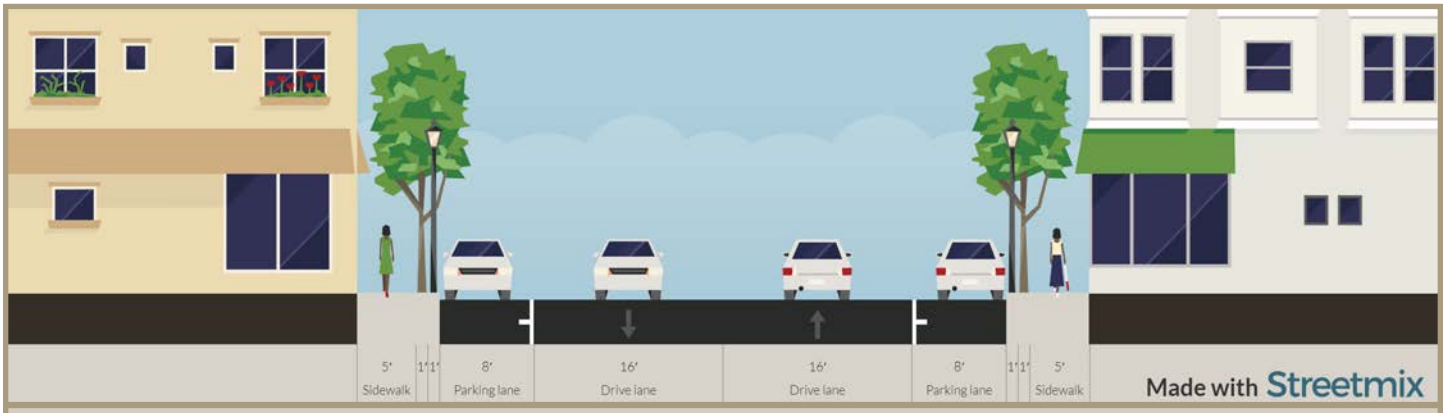


Figure 42. Current allocation of space on North Beverwyck Road.

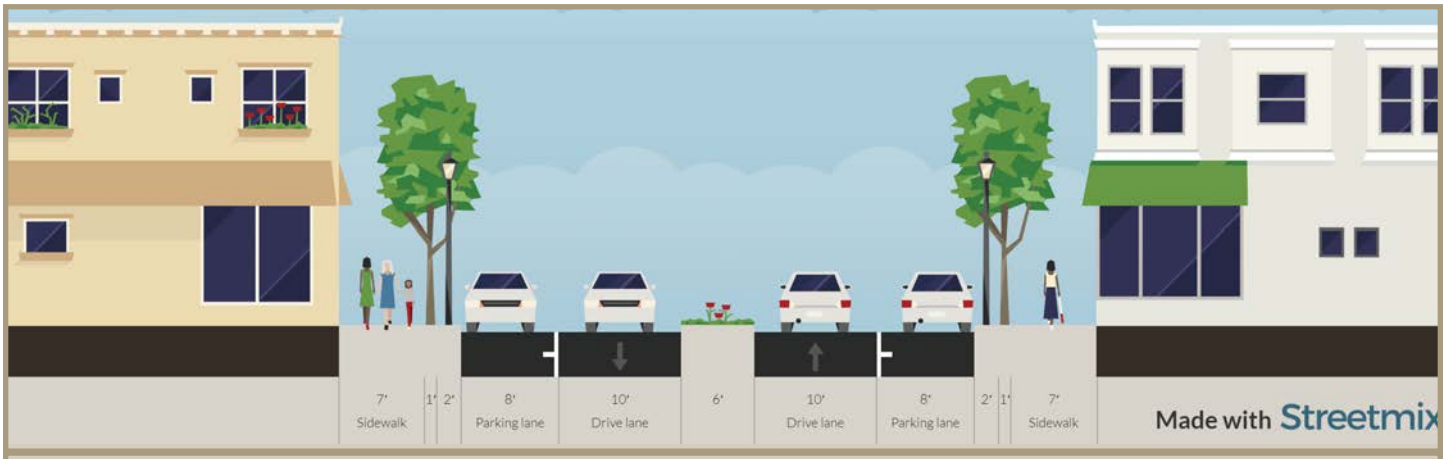


Figure 43. North Beverwyck Road with a center median and expanded sidewalk buffer zone.

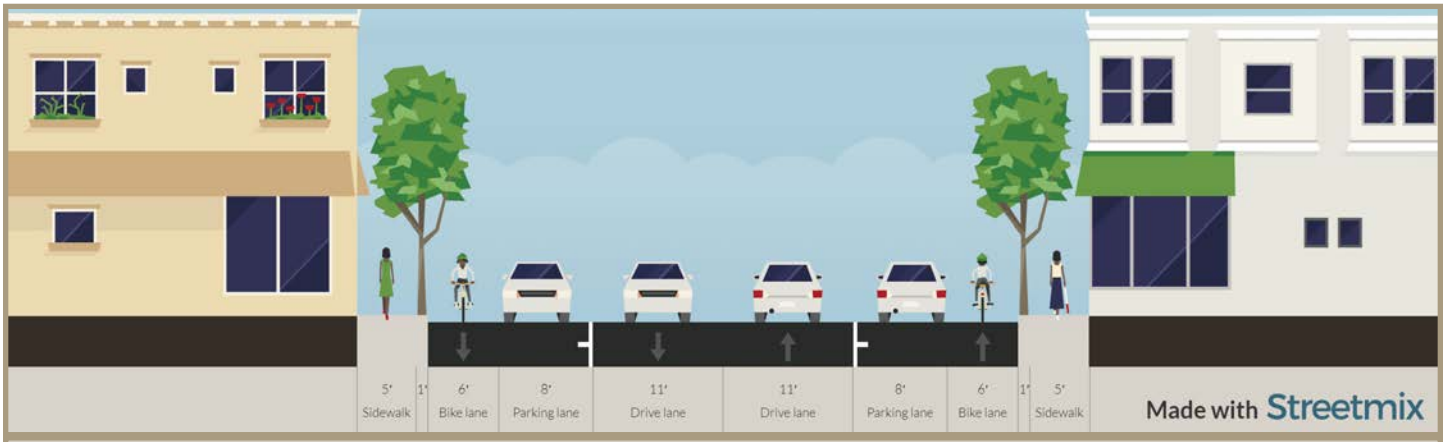


Figure 44. North Beverwyck Road with a bicycle lane.

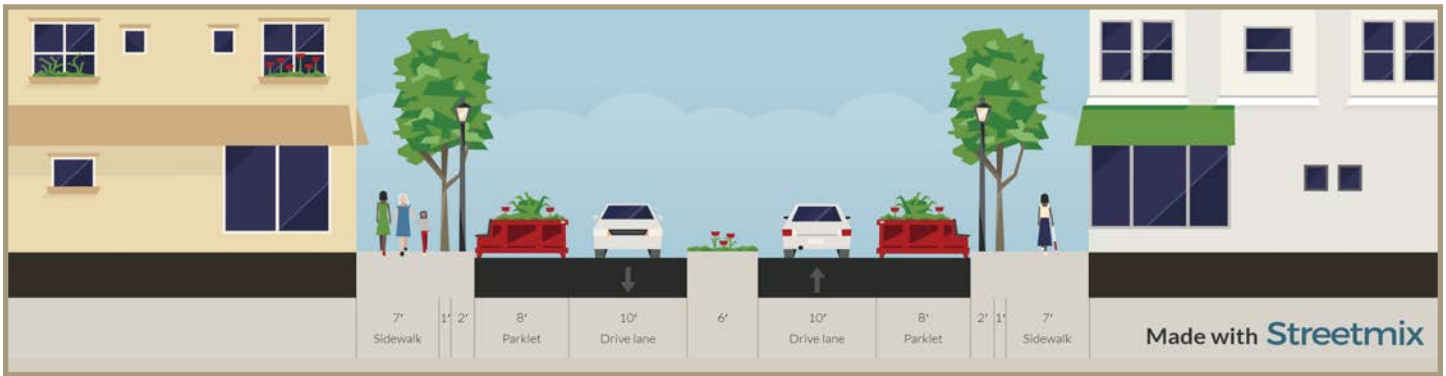


Figure 45. Current parking spaces could be used for parklets with restaurant seating areas, protected bus shelters, and/or curb extensions that shorten long crosswalks and provide space for pedestrian amenities.

can be installed where the parklets are currently depicted in Figure 45, in order to facilitate mid-block crossings. In certain locations along the corridor, it may be best to use this space for a protected bus shelter. Should there be local support, bicycle lanes could also be installed in this space, but this would require removal of parking spaces on one side of the street or removal of the center median.

Figure 46. A curb extension in Camden, New Jersey shortens the crosswalk distance and increases pedestrian visibility.

Specific Recommendations

North Beverwyck Road: Chesapeake Avenue to Minnehaha Boulevard

- Upgrade the streetscape, such improvements could include:
  - "Welcome to Lake Hiawatha" signage and banners
  - Pedestrian-oriented lighting, which could also provide space for hanging banners
  - Consistent tree plantings in covered wells
  - Stamped crosswalks
  - Other visual cues that promote Lake Hiawatha's history and create an enjoyable walking experience

Figure 47. Sloping sidewalk and uncovered tree wells looking south on North Beverwyck Road, north of Lake Shore Drive.

- Install curb extensions and green infrastructure in areas where yellow paint currently designates no parking, especially where the sidewalk is narrow
- Decrease clutter by consolidating signage and consider burying or consolidating the power lines that add to the clutter of the corridor
- Ensure tree wells do not encroach on the sidewalk's 5 pedestrian zone, otherwise, they should be covered to maintain a smooth surface
- Ensure sidewalks across commercial driveways do not exceed an allowable slope
- Stripe high visibility crosswalks and install ADA-compliant ramps at each crosswalk at both Chesapeake Avenue and Hiawatha Boulevard
- Install a small center median throughout the corridor, which could serve several purposes:
- Prevent drivers from making illegal U-turns
- Provide a space which could be used for plantings, banners, and other visual cues that highlight the area as downtown and promote the area's history
- If the median is at least six feet wide at the crosswalk, it can be used as a pedestrian refuge island which improves safety by allowing pedestrians to safely stop halfway through the crossing
- Support installation of mid-block pedestrian crossings
- Identify areas where on-street parking is not commonly used and explore curb extensions or parklets with amenities such as benches, plantings, or covered bus stops
- Extend the curb in front of Kabab Paradise (Figure 20, Location C), which would provide space for outdoor seating and allow for a raised mid-block pedestrian crossing in an area where crossing outside of the crosswalk is common (Figure 48)

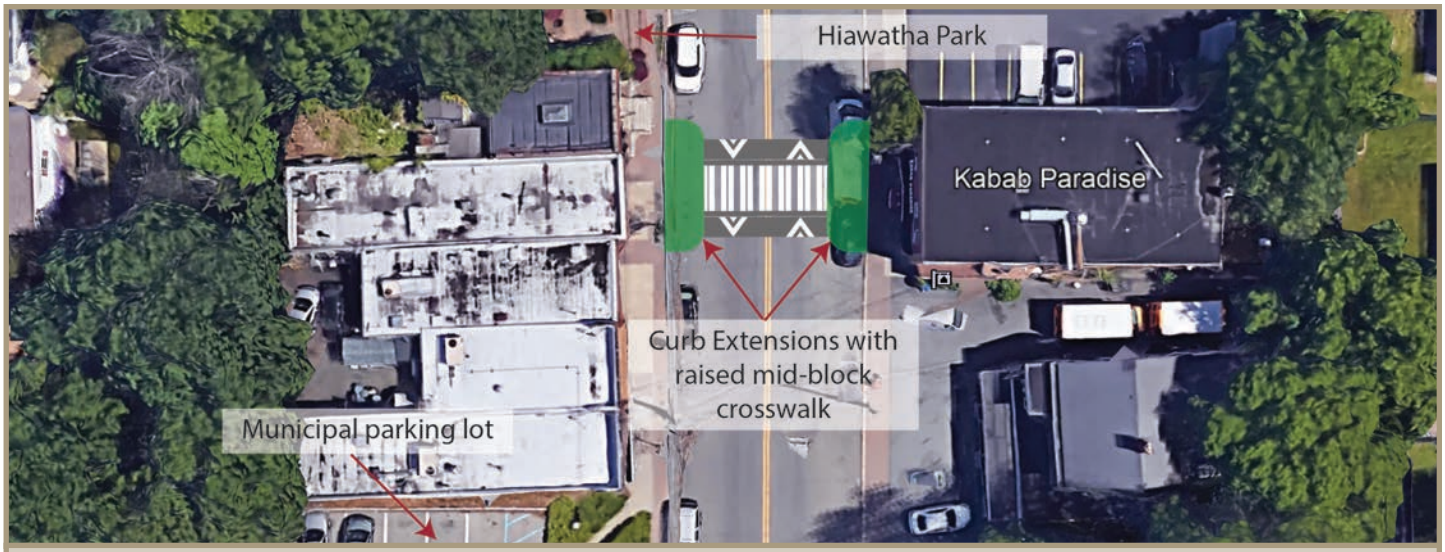


Figure 48. Potential curb extension and mid-block crossing near Kabab Paradise.

North Beverwyck Road: Minnehaha Boulevard to Lake Shore Drive

- Investigate similar road diet and streetscaping improvements suggested earlier
- Install curb extensions and green infrastructure in areas where yellow paint currently designates no parking
- Ensure sidewalks do not slope and all pavers are maintained such that a smooth surface is consistently provided
- Plant trees in empty wells and install covers so that usable sidewalk space is not severely limited
- Consolidate signage
- Stripe high visibility crosswalks at both intersections (Figure 20, Locations D and F)
- Install ADA compliant curb ramps at each crosswalk at both intersections, including for the northeastern corner of the Minnehaha Boulevard intersection where the curb ramp is currently missing
- Explore installing a midblock crossing with curb extensions near the Stephen J. Priola Parsippany Funeral Home (Figure 20, south of Location E)

North Beverwyck Road: Lake Shore Drive to Claudine Terrace

- Investigate similar road diet and streetscaping improvements suggested earlier
- Ensure sidewalks across commercial driveways do not slope
- Upgrade all curb ramps to be ADA-compliant and direct pedestrians into the center of the crosswalk, rather than the center of the intersection
- Explore options for improving the southwest corner of the Lake Shore Drive intersection, where the pedestrian signal, utility box, and telephone pole limit access to the curb ramp (Figure 20, Location H)
- Simplify the Foodtown shopping center driveway by creating a single entrance (Figure 20, Location I). Figure 49 depicts a possible scenario in which these modifications are made. This figure is only for visualization purposes
- Widen the sidewalk at the southern portion of the corridor, across from the Foodtown shopping center (Figure 20, Location I; Figure 49)

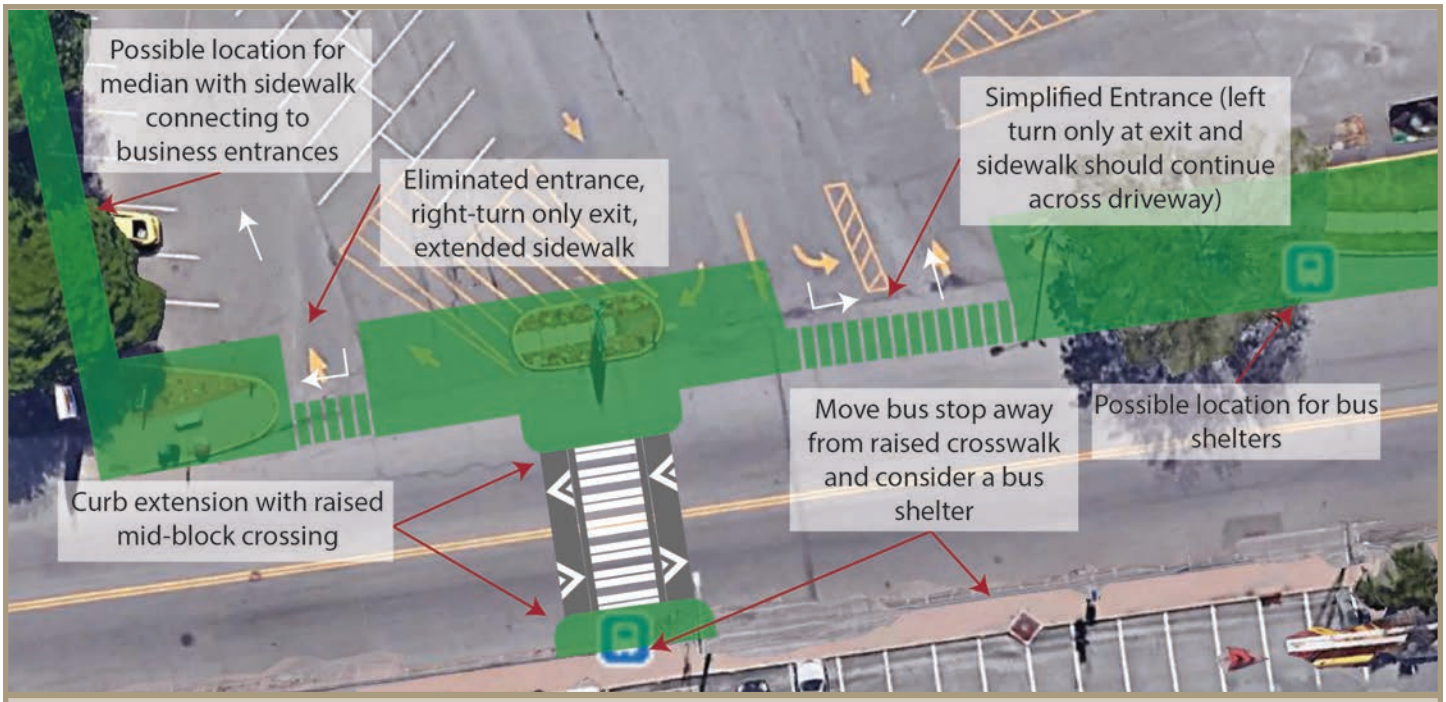


Figure 49. Potential modifications to the entrance of the Foodtown shopping center to improve safety by decreasing crossing distances.

Conclusion

Lake Hiawatha has the potential to define itself as the bustling downtown of the Township of Parsippany-Troy Hills. Currently, the numerous challenges to pedestrian safety and comfort are holding the neighborhood back. Local officials who are aware of this challenge sought the help of the Complete Streets Technical Assistance Program to audit current conditions and recommend potential improvements. As part of this assistance, local stakeholders participated in a course on complete streets and were instructed on how to audit a corridor.

The installation of a median serving as a pedestrian refuge island along the length of the study area would vastly improve the walkability of the neighborhood and should be a long-term goal for the community. Additionally, extending the width of sidewalks throughout the corridor could provide vast improvements. Each of these projects, however, can be a slow and costly process. In the short term, the municipality should create a downtown improvement district to oversee streetscaping improvements and promote Lake Hiawatha's downtown identity. Additionally, temporary parklets and curb extensions with striped mid-block crosswalks can be created with minimal time and cost, but can significantly improve the walkability in the area.

It is important that Parsippany-Troy Hills consider green infrastructure when designing permanent improvements. Stormwater management can work hand-in-hand with traffic calming to improve safety while improving the visual appeal of the area.

Figure 50. WCW participants conducting the walk audit.

Appendix

A. Workshop Flyer

B. Workshop Attendees

C. Workshop Agenda and Field Audit Form

D. Street Smart NJ Campaign Resources

E. Potential Funding Resources

F. Design Resources

A. Workshop Flyer

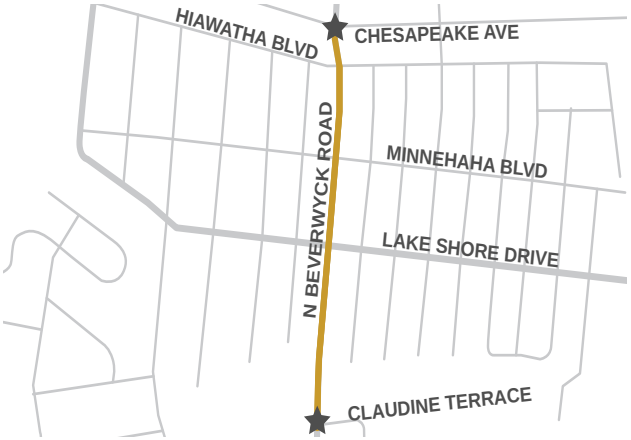
WALKABLE COMMUNITY WORKSHOP

Tuesday, April 9, 2019
1 pm to 5 pm

JOIN US TO ADDRESS WALKABILITY ON NORTH BEVERWYCK ROAD!

Lake Hiawatha Public Library
68 Nokomis Avenue
Lake Hiawatha, New Jersey

For more information email:
heaslya@tcnj.edu



WORKSHOP AGENDA

1:00 pm
Welcome and Walkability Training

2:00 pm
Walking Audit

4:00 pm
Debrief and Next Steps

5:00 pm
Adjourn

A Walkable Community Workshop engages town employees, residents, business owners and workers on issues regarding walking and biking in a community. After training on what to look for, workshop participants will walk a half-mile corridor assessing their existing streets and sidewalks and identifying issues to overcome to ensure safer 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, which is a collaborative venture between Sustainable Jersey (SJ), the Voorhees Transportation Center at Rutgers University (VTC), and the North Jersey Transportation Planning Authority (NJTPA). Funded by the NJTPA, the program is designed to support municipal government efforts to implement complete streets.

NJTPA NORTH JERSEY TRANSPORTATION PLANNING AUTHORITY
SUSTAINABLE JERSEY CERTIFIED
RUTGERS

B. Workshop Attendees

Doug Greenfeld, North Jersey Transportation Planning Authority
Anne Heasley, Sustainable Jersey
Lisa Cintron, Alan M. Voorhees Transportation Center
James Sinclair, Alan M. Voorhees Transportation Center
Susan Favate, Parsippany-Troy Hills
Nick Homysk, Parsippany-Troy Hills
Justin Lizza, Parsippany-Troy Hills
Michael Ruggier, Parsippany-Troy Hills
Paul Levi, Parsippany-Troy Hills
Michael Soriano, Parsippany-Troy Hills
Jack Weinstein, Parsippany-Troy Hills
Dede Murray, Morris County
Gerald Rohsler, Morris County
Dan Callas, TransOptions

C. Workshop Agenda and Field Audit Form

N BEVERWYCK ROAD

WALKABLE COMMUNITY WORKSHOP

Tuesday, April 9, 2019 | 1 pm to 5 pm

Lake Hiawatha Public Library, 68 Nokomis Avenue, Lake Hiawatha, New Jersey

WORKSHOP AGENDA

1:00 pm **Welcome and Walkable Community Presentation**
Complete Streets Technical Assistance (CSTA) project team will lead a presentation to train town employees, residents, business owners and workers on what to look for when auditing walking and biking infrastructure.

2:15 pm **Walking Audit**
Participants will walk a half-mile corridor assessing their existing streets and sidewalks and identifying issues to overcome to ensure safer conditions for pedestrians and bicyclists.

4:00 pm **Debrief and Next Steps**
Participants will generate planning level recommendations to improve the safety, convenience, and comfort of the walking environment of what they observed on the walking audit to be incorporated as recommendations into the final report.

5:00 pm **Adjourn**

This effort is part of the Complete Streets Technical Assistance Program, which is a collaborative venture between Sustainable Jersey (SJ), the Voorhees Transportation Center at Rutgers University (VTC), and the North Jersey Transportation Planning Authority (NJTPA). Funded by the NJTPA, the program is designed to support municipal government efforts to implement complete streets.

WALK AUDIT

Tuesday, April 9, 2019 | 1 pm to 5 pm

Contact

Person Completing: _____

Email: _____

Phone: _____

N Beverwyck Rd from Chesapeake Ave to Minnehaha Blvd

Design

How many lanes are there?

Are there crosswalks?

What is the speed limit?

Is there a median?

Driver Behavior

Circle all that apply:

a. Speeding
b. Blocking crosswalk
c. Not stopping for pedestrians
d. Double parking
e. Loud music
f. Loud engine
g. Not stopping for traffic control

Sidewalk Condition

Are sidewalks present?

No One Side (Which?) Both Sides

Any problems you observed:

a. Sidewalks or paths started and stopped, where?

b. Sidewalks were broken or cracked, where?

c. Sidewalk slope problems, where?

d. Sidewalks were blocked with parked cars, signs, shrubs, etc, where?

e. Sidewalks not wide enough, where?

f. Sight obstructions, where?

Curb Cuts/Ramps

Circle all that apply:

a. Missing

b. Non ADA compliant curb cuts/rams (too steep, not passable, etc.)

c. Aligned with crosswalk: yes or no

d. Truncated domes present: yes or no

e. Truncated domes placed correctly: yes or no

f. Curb extensions: yes or no

g. Other concerns:

Signage

Streets are labeled: Excellent Average Poor None

Pedestrian oriented directions: Excellent Average Poor None

Car oriented directions: Excellent Average Poor None

Parking

Side 1

☐ Yes: Parallel or Angled

☐ No

Side 2

☐ Yes: Parallel or Angled

☐ No

Amenities

Check all that apply:

☐ Bench

☐ Trash Can
- Overflowing? Yes or No

☐ Bus shelter

☐ Bicycle Racks

Lighting

☐ Overhead cobra

☐ Historic

☐ Pedestrian oriented

Is there lighting over the crosswalk?

☐ Yes

☐ No

Trees

- ☐ Frequent, good shape
- ☐ Frequent, poor shape
- ☐ Mostly empty tree wells
- ☐ Infrequent, good shape
- ☐ Infrequent, poor shape
- ☐ No tree wells

Additional Notes:

Minnehaha Blvd to Lake Shore Avenue

Design

How many lanes are there?

Are there crosswalks?

What is the speed limit?

Is there a median?

Driver Behavior

Circle all that apply:

a. Speeding

b. Blocking crosswalk

c. Not stopping for pedestrians

d. Double parking

e. Loud music

f. Loud engine

g. Not stopping for traffic control

Sidewalk Condition

Are sidewalks present?

No **One Side (Which?)** **Both Sides**

Any problems you observed:

a. Sidewalks or paths started and stopped, where?

b. Sidewalks were broken or cracked, where?

c. Sidewalk slope problems, where?

d. Sidewalks were blocked with parked cars, signs, shrubs, etc, where?

e. Sidewalks not wide enough, where?

f. Sight obstructions, where?

Curb Cuts/Ramps

Circle all that apply:

a. Missing

b. Non ADA compliant curb cuts/rams (too steep, not passable, etc.)

c. Aligned with crosswalk: yes or no

d. Truncated domes present: yes or no

e. Truncated domes placed correctly: yes or no

f. Curb extensions: yes or no

g. Other concerns:

Signage

Streets are labeled: Excellent Average Poor None

Pedestrian oriented directions: Excellent Average Poor None

Car oriented directions: Excellent Average Poor None

Parking

Side 1

- ☐ Yes: Parallel or Angled
- ☐ No

Side 2

- ☐ Yes: Parallel or Angled
- ☐ No

Amenities

Check all that apply:

- ☐ Bench
- ☐ Trash Can
  - Overflowing? Yes or No
- ☐ Bus shelter
- ☐ Bicycle Racks

Lighting

- ☐ Overhead cobra
- ☐ Historic
- ☐ Pedestrian oriented

Is there lighting over the crosswalk?

- ☐ Yes
- ☐ No

Trees

- ☐ Frequent, good shape
- ☐ Frequent, poor shape
- ☐ Mostly empty tree wells
- ☐ Infrequent, good shape
- ☐ Infrequent, poor shape
- ☐ No tree wells

Additional Notes:

_____

_____

Lake Shore Avenue to Claudine Terrace

Design

How many lanes are there?

Are there crosswalks?

What is the speed limit?

Is there a median?

Driver Behavior

Circle all that apply:

a. Speeding

b. Blocking crosswalk

c. Not stopping for pedestrians

d. Double parking

e. Loud music

f. Loud engine

g. Not stopping for traffic control

Sidewalk Condition

Are sidewalks present?

No One Side (Which?) Both Sides

Any problems you observed:

a. Sidewalks or paths started and stopped, where?

b. Sidewalks were broken or cracked, where?

c. Sidewalk slope problems, where?

d. Sidewalks were blocked with parked cars, signs, shrubs, etc, where?

e. Sidewalks not wide enough, where?

f. Sight obstructions, where?

Curb Cuts/Ramps

Circle all that apply:

a. Missing

b. Non ADA compliant curb cuts/rams (too steep, not passable, etc.)

c. Aligned with crosswalk: yes or no

d. Truncated domes present: yes or no

e. Truncated domes placed correctly: yes or no

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g. Other concerns:

Signage

Streets are labeled: Excellent Average Poor None

Pedestrian oriented directions: Excellent Average Poor None

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Parking

Side 1

☐ Yes: Parallel or Angled

☐ No

Side 2

☐ Yes: Parallel or Angled

☐ No

Amenities

Check all that apply:

☐ Bench

☐ Trash Can
- Overflowing? Yes or No

☐ Bus shelter

☐ Bicycle Racks

Lighting

☐ Overhead cobra

☐ Historic

☐ Pedestrian oriented

Is there lighting over the crosswalk?

☐ Yes

☐ No

Trees

☐ Frequent, good shape

☐ Frequent, poor shape

☐ Mostly empty tree wells

☐ Infrequent, good shape

☐ Infrequent, poor shape

☐ No tree wells

Additional Notes:

_____

_____

WALK AUDIT

Tuesday, April 9, 2019 | 1 pm to 5 pm

Final Questions

How safe did this area feel?	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
How afraid would you be to walk ALONE in the area during ***daytime***?	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
How afraid would you be to walk ALONE in the area during ***night***?	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
How well care for did this area feel?	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**

Additional Notes:

D. Street Smart NJ Campaign Resources

STREET SMART

STREET SMART NJ FACT SHEET

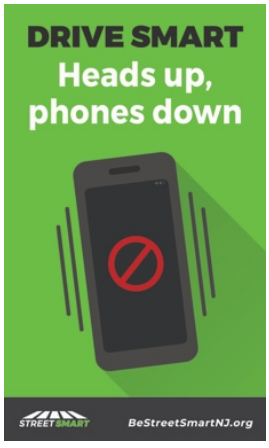
What is Street Smart NJ?

Street Smart NJ is a public education, awareness and behavioral change pedes- trian safety campaign created by the North Jersey Transportation Planning Authority (NJTPA). The campaign combines grassroots public awareness efforts with social media, public outreach efforts and law enforcement to address pedestrian safety.

There are a number of different ways communities can participate. Nearly all campaigns enlist the involvement of community leaders, businesses and organizations and ask police to step up enforcement of pedestrian safety laws. Some campaigns have an evaluation component, including pre- and post-campaign surveys and observations at crash prone locations. Smaller campaigns may be limited to handing out information at community events and dis- playing signage around town.

More than 80 communities have participated in Street Smart in some way since the program's inception in 2013. NJTPA's goal is to increase that number to 100 campaign partners. Communities everywhere are invited to use the strategies and materials on the Street Smart website, bestreetsmartnj.org, to create their own campaigns. The website includes a 'How To' guide, printable materials, social media posts and a sample press release among other resources.

NJTPA staff are available to sit down with interested towns to discuss how to bring Street Smart NJ to their community.



Why do we need Street Smart?

Part of the impetus behind Street Smart NJ was that the Federal Highway Administration identified New Jersey as a pedestrian "focus" state due to the high incidence of pedestrian injuries and fatalities. In 2018, 175 pedestrians died as a result of pedestrian-vehicle crashes in New Jersey. From 2014 to 2018, 870 pedestrians were killed and thousands were injured on New Jersey's roadways. That translates to one death every two days and 11 injuries daily.

Campaign Messages

The Street Smart NJ campaign urges pedestrians and motorists to keep safety in mind when traveling New Jersey's roads. The program's core message is "Walk Smart – Drive Smart – Be Street Smart" with specific messages including We look before crossing; Heads up, phones down; We slow down for safety; We stop for people – it's the law; We use crosswalks; We cross at corners; We cross at the light; and We wait for the walk. The NJTPA has developed pedestrian safety tip cards, in English and Spanish, for public distribution built around the messages. The messages are also printed on posters, banners, street signs, coasters, tent cards and coffee sleeves.

Police Enforcement

One of the keys to Street Smart NJ's success is law enforcement participation. Police officers engage and educate, rather than simply issue citations. In many communities that participate in Street Smart NJ police have issued warnings rather than citations and even rewarded good behavior with coupons, gift cards and free t-shirts. Street Smart NJ public awareness efforts are often conducted in conjunction with this increased enforcement.

Results

Evaluations of previous Street Smart NJ campaigns have shown positive results. There was a 28 percent reduction in pedestrians jaywalking or crossing against the signal and a 40 percent reduction in drivers failing to yield to crossing pedestrians or cyclists following campaigns the NJTPA managed in March 2016.

E. Potential Funding Sources

This appendix provides a list of common 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. Links to two online databases with additional funding sources has also been included. Grants listed are highly competitive and grant application requirements should be carefully reviewed before making the decision to apply. From the reviewers' perspective, application review is time-consuming and often applications will not be reviewed if all the required elements are not received by the published deadline. The most successful applications tell the story of the populations most in need of the proposed improvements, especially disadvantaged communities or vulnerable groups such as seniors. Applications should use compelling pictures, data and other documentation, and indicate how and why improvements are prioritized.

New Jersey Department of Transportation

The Division of Local Aid and Economic Development at the New Jersey Department of Transportation (NJDOT) provides funds to local public agencies such as municipal governments for construction projects to improve the state's transportation system. The state's Transportation Trust Fund and the federal Safe, Accountable, Flexible, Efficient Transportation Equity Act — A Legacy for Users (SAFETEA-LU) legislation provides the opportunity for funding assistance to local governments for road, bridge and other transportation projects. NJDOT and the three metropolitan planning organizations that cover the state administer federal aid programs. 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 municipalities in New Jersey 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://www.state.nj.us/transportation/business/localaid/municaid.shtm

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://www.state.nj.us/transportation/business/localaid/countyaid.shtm

Bikeways: This program funds bicycle projects that create new bike path mileage, working towards NJDOTs goal of 1,000 miles of dedicated bikeways in New Jersey. Special consideration will be given to bikeways physically separated from vehicle traffic, but on-road bike lanes or other bike routes are also eligible for funding. Learn more here: https://www.state.nj.us/transportation/business/localaid/bikewaysf.shtm

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, in order to promote increased usage of transit by all segments of the population and decrease private vehicle use. Learn more here: https://www.state.nj.us/transportation/business/localaid/safe.shtm

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 Commissioner of Transportation and the inter-agency Transit Village Task Force in order to be eligible to apply. Learn more here: https://www.state.nj.us/transportation/business/localaid/transitvillagef.shtm

Other NJDOT Assistance

Bicycle and Pedestrian Planning Assistance: NJDOT offers Local Technical Assistance (LTA) funding through the Office of Bicycle and Pedestrian Programs. Under this program, on-call consultants are paired with communities to complete a variety of projects including bicycle and pedestrian circulation and master

plan studies, safety assessments, trail feasibility studies, bikeway plans, and improvement plans for traffic calming projects. For more information, please contact the state bicycle and pedestrian program coordinator at bikeped@dot.nj.gov

Federal Aid Infrastructure Grant Programs

Safe Routes to School: The Safe Routes to School Program provides federal funds for infrastructure projects that enable and encourage children in grades K-8, 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 Street Policy and Transit Village designation. Learn more here: https://www.state.nj.us/transportation/business/localaid/srts.shtm

Transportation Alternatives Program: The Transportation Alternatives Program 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 and are a designated Transit Village. Learn more here: https://www.state.nj.us/transportation/business/localaid/alternatives.shtm

New Jersey Department of Environmental Protection: The Recreational Trails 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. Learn more here: https://www.nj.gov/dep/greenacres/trails/index.html

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 here: http://www.sustainablejersey.com/

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

New Jersey Healthy Communities Network: The New Jersey Healthy Communities Network is a partnership of grantees, funders and advocate organizations who seek to have collective impact on community well-being to support healthy eating and active living. The Community Grant Program provides opportunities to develop healthy environments for people to live, work, learn and play by funding policies, projects and programs that support walking and bicycling. Learn more here: https://www.njhcn.org/

Funding from Other Sources

Various other funding sources exist that may help municipalities further complete 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:

Sustainable Jersey Grants Portal: http://www.sustainablejersey.com/grants-resources/grants-portal/

Together North Jersey Funding and Resources Database: https://togethernorthjersey.com/?page_id=25162

Federal Funding

1. **US Department of Transportation (USDOT)**
   - Better Utilizing Investments to Leverage Development (BUILD, replaced TIGER)
2. **Federal Highway Administration (FHWA) Programs**
   - Congestion Mitigation and Air Quality Improvement (CMAQ)
   - Surface Transportation Program (STP)
   - Highway Safety Improvement Program (HSIP)
   - National Highway Performance Program (NHPP)
   - Transportation Alternatives Program (TAP)
   - Safe Routes to School (SRTS)
   - Local Safety / High Risk Rural Roads Program (HRRR)
   - National Highway System (NHS)
   - Recreational Trails Program - Including hiking, bicycling, in-line skating, equestrian use, cross-country skiing, snowmobiling, off-road motorcycling, all-terrain vehicle riding, four-wheel driving, or using other off-road motorized vehicles.
   - Federal Lands Access Program (FLAP) - The Access Program supplements State and local resources for public roads, transit systems, and other transportation facilities, with an emphasis on high-use recreation sites and economic generators.
   - Emergency Relief - Repair or reconstruction after national disaster, can include bicycle and pedestrian facilities
3. **National Highway Traffic Safety Association**
   - NHTSA Section 402 State Highway Safety Program
   - NHTSA Section 405 Non-Motorized Safety Grants
4. **Federal Transit Administration Programs**
   - Urbanized Area Formula Program (UZA) - Public transit and bike routes to transit
   - Fixed Guideway Capital Investment Grants - Transit systems and bike parking
   - Bus and Bus Facilities Formula Grants - Includes bike parking facilities
   - Enhanced Mobility of Seniors and Individuals with Disabilities - Access to transit facilities for seniors

State Funding

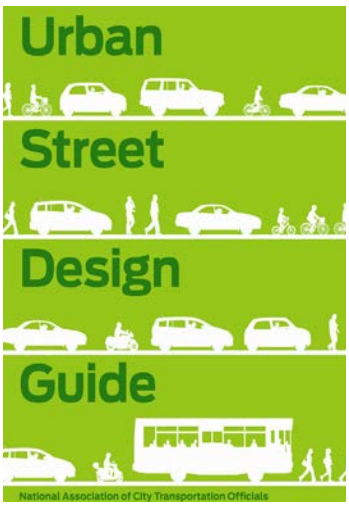
5. **Municipal Aid ($140m)**
6. **County Aid ($150m)**
7. **Local Bridges ($44m)**
8. **Safe Streets to Transit ($1m)**
9. **Transit Village ($1m)**
10. **Bikeways ($1m)**
11. **Local Aid Infrastructure Fund ($7.5m)**
12. **Safe Corridors Highway Safety Funds**
13. **Urban Aid ($10m)**
14. **New Jersey Trails Program (Department of Environmental Protection)**
15. **Other Funding Sources**
16. **Regional/Local CMAQ Initiatives Program (NJTPA)**
17. **NJ Division of Highway Traffic Safety**
18. **Open Space &Farmland Preservation**
19. **Homeland Security Transit Security Grant Program (TSGP)**

Other Sources

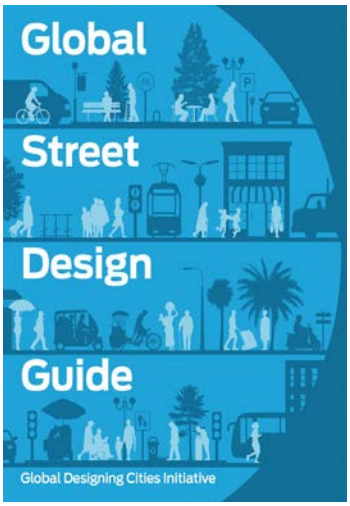
20. **County Capital Program**
21. **Municipal Capital Programs**
22. **Foundations**

F. Design Resources

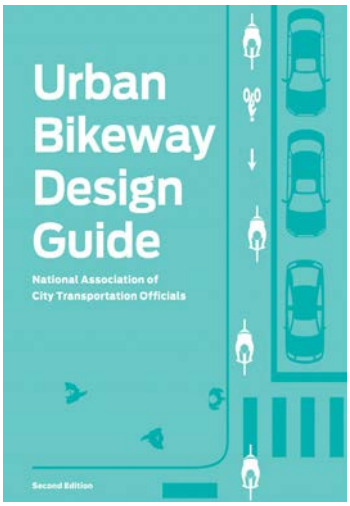
NACTO Guides



[Urban Street Design Guide]

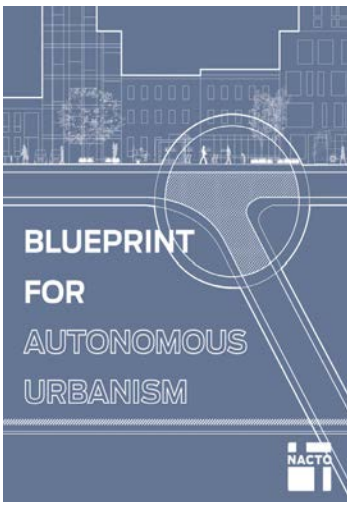


[Global Street Design Guide]



[Urban Bikeway Design Guide]

[Transit Street Design Guide]

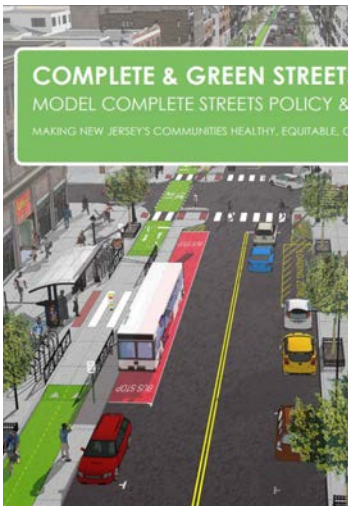


[Blueprint for Autonomous Urbanism]

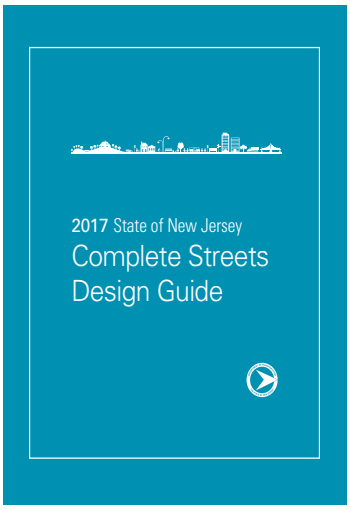
[Urban Street Stormwater Guide]

[Bike Share Station Siting Guide]

NJDOT Guides



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

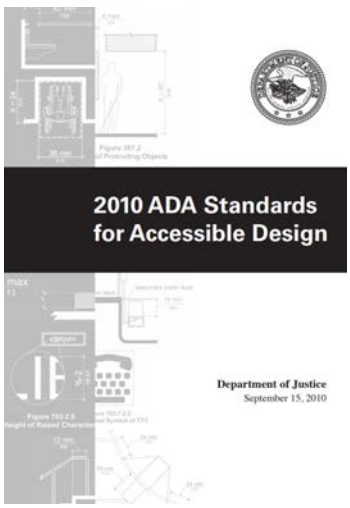


[2017 State of New Jersey Complete Streets Design Guide]

[A Guide to Policy Development]

[A Guide to Creating A Complete Streets Implementation Plan]

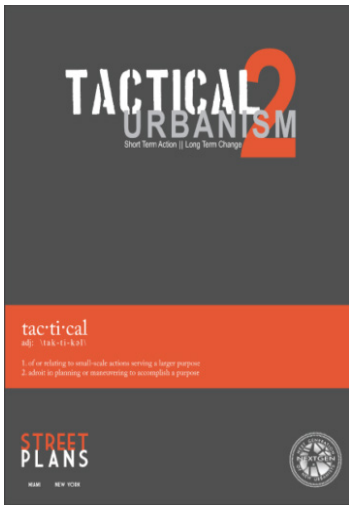
ADA Guidelines



[ADA Standards for Accessible Design]

Tactical Urbanism Guides

[Tactical Urbanism 1]



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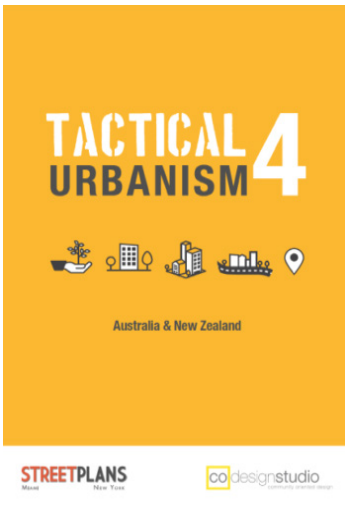
[Tactical Urbanism 3]



[Tactical Urbanism 4]

[Tactical Urbanism 5]

[Tactical Urbanism]

[Tactical Urbanist's Guide to Materials and Design Version 1.0]

[The Open Streets Guide]

[Mercado: Lessons from 20 Markets Across South America]

[Public Space Stewardship Guide]