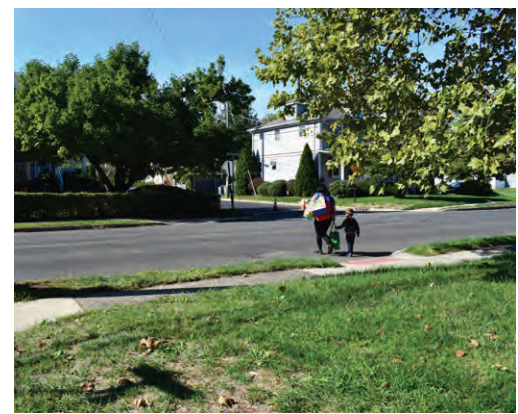


Vosseller & West Maple Avenue Walkable Community Workshop

Borough of Bound Brook, Somerset County, NJ

2023



RUTGERS

Edward J. Bloustein School
of Planning and Public Policy



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 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 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 \$2 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 Bound Brook officials and other key stakeholders that made this project possible:

- Jake Hardin, Bound Brook Borough Council President
- Dominic Longo, Bound Brook Council
- Hector Herrera, Bound Brook Borough Administrator
- Jasmine McCoy, Bound Brook Borough Clerk
- Agatha Perez, Bound Brook Borough Deputy Clerk
- Dale Leubner, Bound Brook Superintendent of Public Works
- Linda Brnicevic, Bound Brook Planning Board (Now on Council)
- Angela Knowles, Somerset County Office of Planning, Policy and Economic Development
- Kenneth Wedeen, Somerset County Office of Planning, Policy and Economic Development
- RideWise TMA

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

Table of Contents

Executive Summary	1
Background	2
What is a Complete & Green Street?	3
Benefits of Complete Streets	4
Complete Streets in New Jersey and Bound Brook.....	5
Walking Audit Location and Assessment of Need.....	5
Workshop Methodology	6
Workshop Findings	7
Corridor Summary.....	7
Detailed Conditions and Recommendations	9
Recommendations	13
1. Adopt a Complete Streets Ordinance.....	13
2. Improve Crosswalks and Sidewalks.....	13
3. Address Parking Violations and Signage	14
4. Add Bicycle Facilities.....	14
5. Encourage Active Transportation.....	15
6. Conduct a Speed Study	15
7. Investigate a Four-Way Stop	15
Conclusion	15
Appendix	17
A. Workshop Flyers	18
B. Field Audit Form.....	20
C. Potential Funding Resources	24
D. Design Resources	27

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

The Borough of Bound Brook, New Jersey, participated in the 2022-2023 North Jersey Transportation Planning Authority (NJTPA) Complete Streets Technical Assistance (CSTA) Program. This report identifies several recommendations to promote walking as a means of travel and to improve walkability along Vosseller Avenue and West Maple Avenue in the Borough of Bound Brook, New Jersey (Figure 1). The report also calls for the installation and improvement of high-visibility crosswalks and Americans with Disabilities Act (ADA)-compliant crosswalks throughout the route. Additionally, the report recommends bicycle infrastructure, adopting an updated Complete Streets ordinance, and addressing parking violations. A long-term recommendation is to conduct a traffic study to determine appropriate intersection controls. The most significant obstacles to walkability in the study area are the sight lines at intersections and non-compliant driver behavior at crosswalks, such as failing to stop for pedestrians.

The recommendations in this report were developed through a Walkable Community Workshop (WCW) that was held on October 3, 2022, which was a collaborative effort with municipal employees and Borough stakeholders. The study corridor consists entirely of municipal roads. Smalley School and Bound Brook High School are located within a half mile of the corridor. Improvements along the corridor are necessary to ensure student safety, particularly for students whose families do not have access to a vehicle. The corridor is also an essential connection between Bound Brook's residential neighborhoods and the downtown commercial district, including the Bound Brook Train Station.

The lessons learned by all participants during the workshop can be applied to other roadways in Bound Brook. 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 Borough.



Figure 1. Pedestrian crossing Vosseller Avenue.

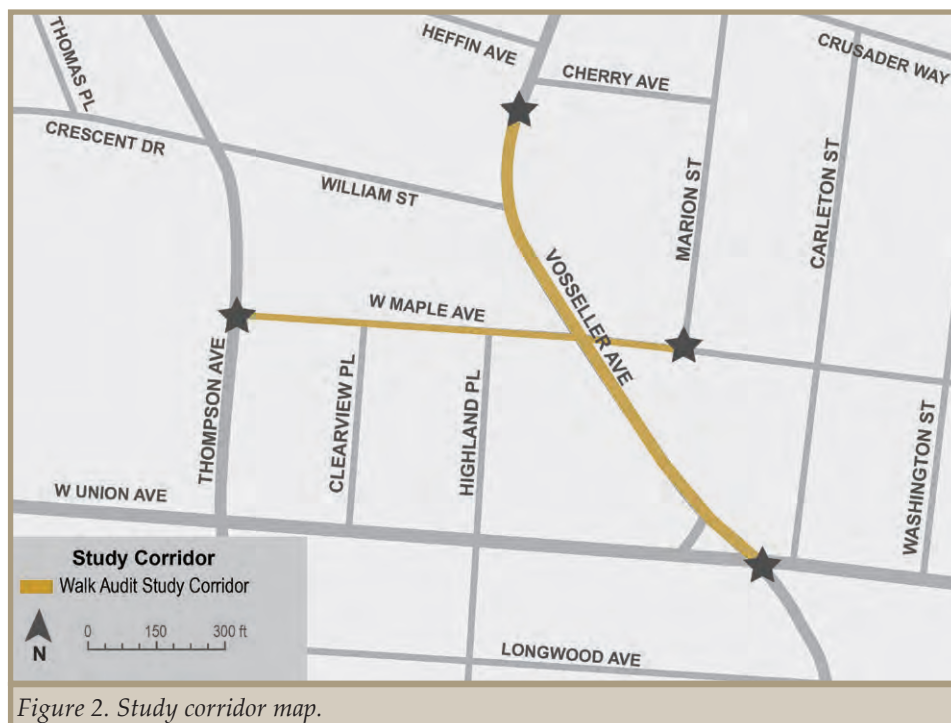
Background

The NJTPA created the CSTA Program in 2018 to assist municipalities in advancing or implementing Complete Streets, a need identified by the Together North Jersey consortium. This report is part of the third round of the CSTA Program, in which seven 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 under-served populations were given additional consideration.

Bound Brook requested a Walkable Community Workshop on West Maple Avenue and Vosseller Avenue (Figure 2). Bound Brook is a small suburban community bisected by Union Avenue (State Route 28) and the railroad tracks of the NJ TRANSIT Raritan Valley Line. The northern end of the study area is Vosseller Avenue and Cherry Street, at the northern gateway entrance to the town. All Bound Brook's schools are located within one mile's walking distance of the study area. Additionally, the Bound Brook Train Station is a mile south of the southern end of the study area, through the downtown commercial district. The workshop route is mainly lined with single-family homes until the southernmost point, where the Union Avenue business district begins.

The Bound Brook school district does not provide busing for students, so students are either driven to school or arrive on foot or by bicycle. Sidewalks are in place leading up to schools within the study area, but pavement conditions vary. Bound Brook officials expressed interest in improving walkability in the study area to encourage active transportation to school and alleviate traffic congestion in the area. Improving pedestrian infrastructure would also help students in zero-car households arrive at school safely.

Prior to conducting the workshop, the CSTA project team met with Borough officials to discuss the study area and gain a better understanding of the corridor and the need for a walking audit. Municipal employees and stakeholders, including area residents, participated in a WCW on October 3, 2022. 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 pedestrian and bicycle design. The project team then walked the length of the study corridor with the workshop participants, making note of existing conditions, observing driver and pedestrian behavior, and talking about future needs.



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 3). 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 new 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.” This section of the BIL requires that states and MPOs use 2.5 percent of their planning and research funds for Complete Streets activities that will increase safe and accessible transportation options.

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 incorporate the needs of bus and rail commuters by installing benches, shelters, lighting, and signs.

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 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 at 20 mph they are down to five percent (Figure 4 and Figure 5). 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.

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 sets out that deaths and serious injuries due to roadway crashes are unacceptable. Safe System Approach refocuses transportation system design and operation on anticipating human errors and reducing impact forces to minimize crash severity and save lives. Under this approach, the 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 3. This Complete Street in New Brunswick, NJ, features a bicycle path, bus lane, and enhanced pedestrian crossing.

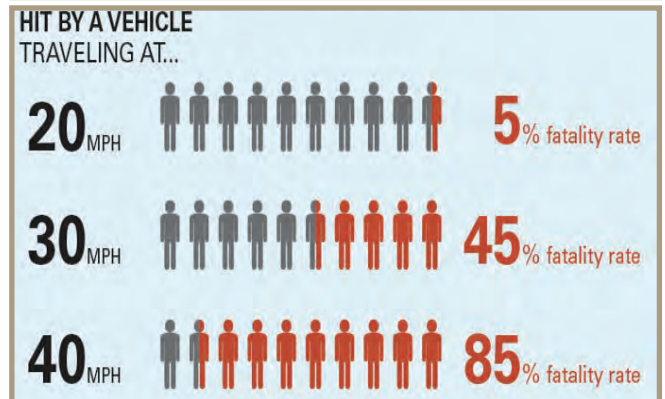


Figure 4. Graphic showing increased fatality rate as vehicle speeds increase. (USDOT)

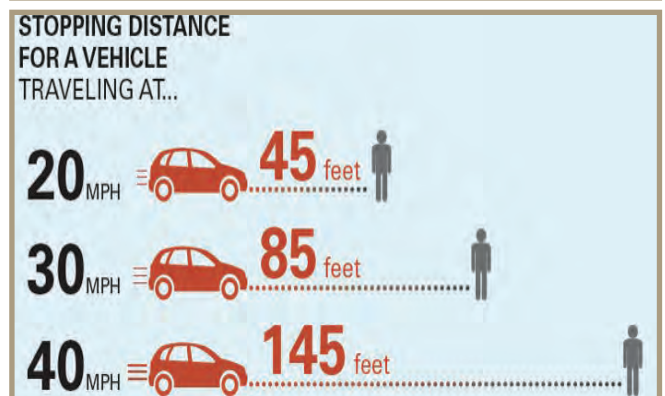


Figure 5. Graphic showing increased stopping distance as vehicle speeds increase. (USDOT)

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 6). 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 6. 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 7). 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 7. Division Street in Somerville was converted into a popular pedestrian plaza.

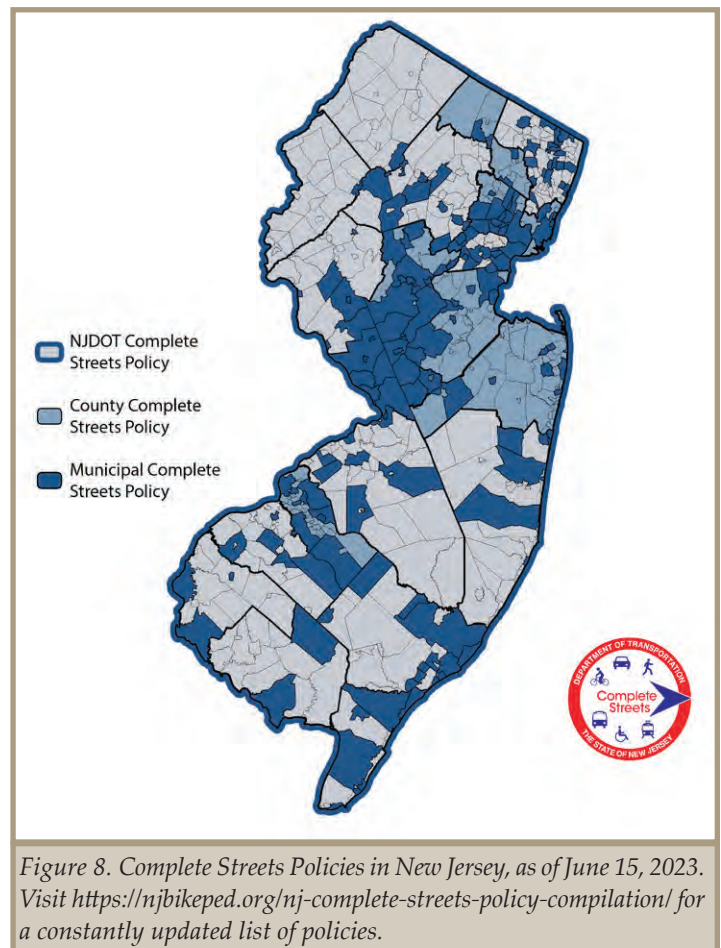
Transportation Equity

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, ethnicity, ability, or other differences. 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 New Jersey and Bound Brook

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 six 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 new 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, 174 municipalities have implemented their own policies (Figure 8).

Somerset County adopted a Complete Streets policy in 2016, and Bound Brook passed a Complete Streets resolution in 2015.



Walking Audit Location and Assessment of Need

According to the 2020 US Census, Bound Brook is home to approximately 11,988 residents within an area of 1.7 square miles. The median age is 35.1, and the estimated median household income is \$67,056. Bound Brook is home to a relatively large population of Hispanic residents, 34.87 percent compared to 20 percent statewide. The Borough is bordered by Bridgewater to the north and west, Middlesex to the east and South Bound Brook to the south.

The walk audit location includes sections of two different roads in Bound Brook's center of town (Figure 9). The southernmost point of the corridor begins at the intersection of Vosseller Avenue and Union Avenue (Rt. 28). The majority of West Maple Avenue is residential on both sides with on-street parking. The Vosseller Avenue section of the corridor is residential, with limited on-street parking.

The study corridor was selected due to Bound Brook's interest in promoting safe alternatives to driving to school, as well as an upcoming residential building being constructed on the corner of Vosseller and West Maple. The corridor also creates a connection between Bound Brook's central residential neighborhoods and the southern downtown district with its shopping, entertainment, and public transportation access. Addressing safety concerns for bicyclists and improving the pedestrian realm will also generate foot traffic for local businesses and encourage bicyclists to ride on the road rather than on the sidewalk.

Borough staff noted that the corridor is unwelcoming to pedestrians with faded crosswalks, high vehicle speeds, and high volumes of vehicular traffic, especially approaching the intersections. Sidewalk conditions include tree root uplifts and discontinuity/unevenness at driveways and walkways have also created tripping hazards.

There are various safety and mobility concerns at the intersection of Vosseller Avenue and West Maple Avenue. Specifically, there is an obtuse angle at the northeast corner, which limits the sight line for motorists

approaching the intersection. In addition, there are only stop signs in the east and west directions on West Maple Avenue, which presents opportunities for confusion and mistaken right of way among drivers, pedestrians, and bicyclists.

Traffic Volumes and Speed

NJDOT recorded traffic counts for Vosseller Avenue north of the study corridor in 2019, finding an annual average daily traffic (AADT) volume of 3,952. As a comparison, W. Union Avenue (Route 28) had a recorded volume of 20,208 vehicles the same year. The speed limit is 25 mph throughout the study corridor, but recent data on recorded traffic speed is not available.

Crash History

According to NJDOT crash data, during the five years between 2017-2021, there have been 27 crashes involving a pedestrian and 10 involving a bicyclist in Bound Brook. None of those occurred in the study corridor, but there were 52 collisions involving vehicles in the study area. Figure 9 shows all crashes, including those only involving vehicles.

Workshop Methodology

Prior to conducting the workshop, the CSTA project team met virtually with Bound Brook 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 WCW held on October 3, 2022, included residents, elected officials, school officials, staff of the Somerset County Office of Planning, Policy, and Economic Development, representatives of RideWise transportation management association, and NJTPA staff. Approximately 12 community members participated.

The WCW 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 (Figure 9).

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 then walked to the corridor and split up into two groups. Each group walked the entire length of the corridor. The audit consisted of discussing issues, writing observations, and identifying the existing conditions witnessed by participants familiar with the area. The project team then conducted a post-audit debrief to review the most important findings and potential recommendations for improvements. Following the virtual walk audit, the project team developed a series of recommendations for the corridor.

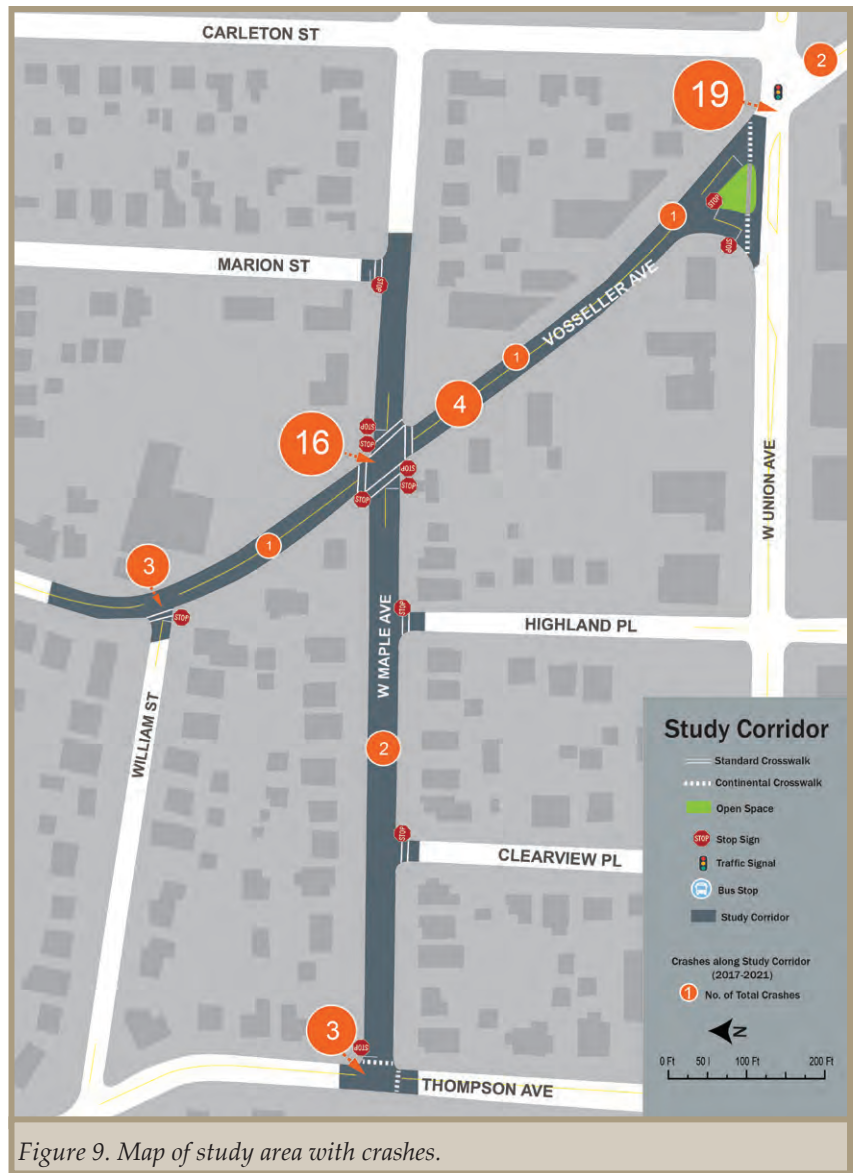


Figure 9. Map of study area with crashes.

Workshop Findings

This section highlights 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.

Corridor Summary

Sidewalks

Sidewalks are present on both sides of Vosseller Avenue and West Maple Avenue but are not in good condition. Quality issues include uneven pavement, rough and bumpy surface, cracks, and loose gravel. Many of these issues create a tripping hazard for pedestrians and negatively impact accessibility, particularly for seniors and people with disabilities (Figures 10-12). There is no bike infrastructure (lanes or paths) along the corridor, which may lead to bicyclists choosing to ride on the sidewalk (Figure 13). The audit team observed two people riding their bikes on the sidewalk instead of the travel lane.

The sidewalks along Vosseller Avenue and West Maple Avenue are four feet wide, which meets minimum standards but can feel narrow for pedestrians as it does not allow people to walk side-by-side (Figure 14). The New Jersey Complete Streets Design Guide states that a 5-foot minimum sidewalk width is required to meet walkability standards, and sidewalks should be constructed as wide as possible to accommodate pedestrian demand. As this is near a school, larger groups of pedestrians are expected during arrival and dismissal times.



Figure 10. Short section of unmaintained sidewalk.



Figure 11. Missing concrete sidewalk section.



Figure 12. Sidewalk raised by tree roots.



Figure 13. Bicyclist using sidewalk.



Figure 14. Sidewalk does not comfortably allow pedestrians to walk side-by-side.

Intersections and Crosswalks

There are nine intersections along the study corridor, four along Vosseller Avenue and five along West Maple Avenue. Only the intersection at Vosseller Avenue and West Union Avenue is signalized (Figure 15). The intersection of Maple Avenue and Vosseller Avenue has a two-way stop for Maple. Only these two locations have marked crosswalks in all directions.



Figure 15. Signalized intersection with crossing guard.

During the walking audit, the team observed drivers at the West Maple Ave and Vosseller Avenue intersection failing to stop for pedestrians waiting to cross (Figure 16). A crossing guard was present at the intersection of Thomas Avenue and Maple Avenue. He noted that drivers were aggressive, and his presence was required to get drivers to stop for pedestrians in the marked crosswalk.

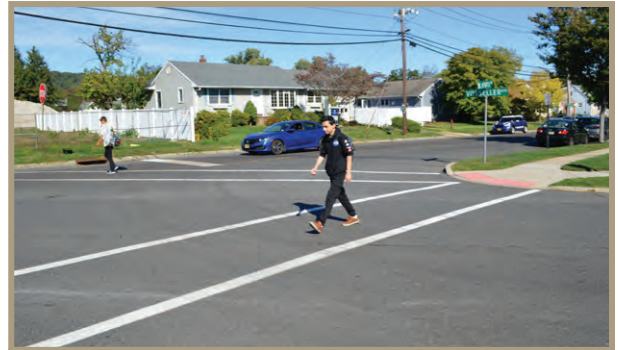


Figure 16. Students crossing Vosseller Avenue and Maple Avenue intersection.

Most, but not all the curb ramps appear to be ADA-compliant (Figure 17, 18). However, drainage issues were observed at multiple corners, making the ramp difficult to use (Figure 19).



Figure 17. ADA-compliant curb ramps,



Figure 18. Non-compliant curb ramp.



Figure 19. Puddling at base of ramp.

Safety

Although the audit occurred during the day, the location of light poles suggests that the corridor may lack sufficient lighting for pedestrians at night. The distance between the existing overhead cobra lighting fixtures suggests that they are too far apart to provide uniform lighting without excess shadows. At intersections, a single streetlight is placed at the closest utility pole, which may not create optimal lighting for the crosswalk. Lighting needs of both the sidewalks and the crosswalks should be assessed, especially at intersections.

A speed study was not conducted; however, the research team noted that cars on Vosseller Avenue appeared to be traveling over 25 mph and observed drivers failing to yield to pedestrians in crosswalks. Low traffic volumes and a wide roadway make drivers feel comfortable traveling at higher speeds. Walk audit participants also complained about speeding at night.

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. The residential properties along the corridor all appeared to be well maintained. However, that maintenance does not extend to the sidewalk.

The audit team observed that there were trees along the study corridor, which provided shade to the pedestrians. However, some sections had fewer trees and so less shade (Figure 20). There is a lack of pedestrian and bicyclist amenities on the corridor such as benches and bicycle racks.



Figure 20. South side of roadway (left) with less trees than north.

Detailed Conditions and Recommendations

The study corridor is made up of two roadways with different characteristics. This section looks at detailed conditions in each section, with recommendations.

Maple Avenue and Thompson Avenue

Thompson Avenue is a two-lane county roadway (CR 525) that is not part of the study corridor. The intersection with Maple Avenue was recently repaved, and as such, the roadway striping is in excellent condition. A marked continental-style crosswalk is painted on the southern and western legs (Figure 21). There is no crosswalk provided on the northern leg of the intersection. Google Street View shows that in previous years a crosswalk existed on the northern leg instead of the southern leg. It is unclear why the County reconfigured the intersection and did not provide crosswalks on all corners.

There are ADA-compliant ramps at the corners that face a marked crosswalk. Updated signs inform drivers of the crosswalk. However, they are static and do not have pedestrian-activated lights (Figure 22). One overhead cobra light is located on the northern corner, where the crosswalk used to be.

Maple Avenue, from Thompson Avenue to Vosseller Avenue

East of the intersection, Maple Avenue is a 40-foot-wide two-lane residential roadway with street parking on both sides (Figure 23). The center dividing line is only present near the intersection with Thompson. Parking along the roadway requires a residential permit, but there is no signage near the intersections prohibiting parking within 25-feet of the corners. The lack of signage may encourage drivers to park too close to the corner, which blocks visibility, creating a potential hazard.

Two minor roadways—Clearview Place and Highland Place—terminate at Maple Avenue. At these intersections, there is a marked crosswalk across the minor roadway, but not across Maple. The corners have curb ramps, but they do not meet current ADA standards.

There are some trees present along the roadway, but not enough to create a full canopy. During the audit, very few cars were parked along the street, providing a large open expanse of pavement for drivers. More trees could provide shade for pedestrians and can help reduce speeds by providing a vertical frame of reference.

There is no bicycle infrastructure along Maple Avenue.



Figure 21. Looking west on Maple toward Thompson Avenue.



Figure 22. Looking north on Thompson Avenue.



Figure 23. Looking west on Maple toward Thompson Avenue.



Figure 24. Intersection of Maple Avenue and Clearview Place. Parking signage does not advise drivers against parking too close to the corner. There is no crosswalk across Maple.

Maple Avenue and Vosseller Avenue

Maple Avenue and Vosseller Avenue intersect at a skewed angle. This creates longer crosswalks and limits visibility, especially at the southwestern corner (Figure 25). Maple Avenue is stop controlled, while Vosseller has the right of way. On Maple, the Borough has installed multiple stop signs (Figure 26). This enhances the visibility of the stop control and suggests that there may have been issues in the past with drivers failing to stop. Unlike the previous intersections, a "No Parking Anytime" sign is posted in advance of the intersection in the eastbound direction (Figure 27). A similar sign ("no parking here to corner") is posted in the westbound direction. However, there is no complimentary roadway or curb striping to reinforce this restriction. While vehicle traffic was light during the audit, a small queue did develop at the intersection during school dismissal (Figures 28, 29).



Figure 25. A house and foliage limit visibility at the corner.



Figure 26. Three stop signs are visible for eastbound drivers on Maple Avenue.



Figure 27. "No Parking" sign approaching intersection.



Figure 28. Looking east to Vosseller on Maple Avenue.

Curb ramps exist at all four corners and appear to be ADA-compliant. However, a small puddle was seen on the northwestern corner (Figure 30). Crosswalks are marked in the continental style. Signage notifying drivers of the crosswalks are posted on Vosseller. However, they are old and have faded (Figure 31). A crossing guard was not posted at this intersection, and the group observed pedestrians waiting to cross without drivers stopping. There is a single overhead light at the northeast corner.



Figure 29. A queue of vehicles waiting to cross Vosseller Avenue.



Figure 30. Looking at the intersection from the northwest corner.



Figure 31. Crosswalk signage on Vosseller.

Maple Avenue, from Thompson Avenue to Marion Street

East of the intersection, Maple Avenue continues in the same manner as the previous section, with one lane in each direction and curbside parking. The sidewalks continue to vary in condition. The audit team viewed this area at school dismissal time, and automobile traffic picked up at the time creating a line of vehicles at the intersection. (Figure 29).

Vosseller Avenue, Cherry Avenue to Maple Avenue

Vosseller Avenue is thirty-feet wide and has one traffic lane in each direction. Between Cherry Street and Maple Avenue, parking is not allowed, creating two wide 15-foot lanes.

Cherry Avenue is also 30-feet wide, and parking is allowed on both sides. Signage advising drivers not to park close to the corner are in place, but the team observed multiple vehicles parked illegally. This creates serious visibility issues for all roadway users (Figure 32). There are curb ramps between Cherry Avenue and Helfin Street, but no marked crosswalk or signs reminding drivers to stop for pedestrians. The team observed multiple pedestrians crossing here. (Figure 33). The closest marked crosswalk is at Maple Avenue, 620 feet south. There are no marked crosswalks north of this intersection prior to the sidewalk ending on the east side.

South of Cherry Avenue, a new residential building is proposed near the intersection with William Street (Figure 34). Near this location, Vosseller Avenue curves limiting visibility. There is a marked crosswalk to cross William Street, but not Vosseller. A single streetlight is oriented diagonally over the intersection. The team observed multiple instances of uneven sidewalk in this section.

Maple Avenue and Vosseller Avenue

See previous page.

Vosseller Avenue, Maple Avenue to West Union Avenue

South of Maple Avenue, Vosseller Avenue remains the same width, but parking is allowed on the east side of the roadway, perhaps to accommodate visitors to the Little Dolphin Swim Academy. The audit team did not see any cars parked here, and residents stated that it is very rare for someone to do so. This may be because the narrow road width makes parking appear risky (Figure 35).



Figure 32. Looking west on Cherry Avenue, illegal parking blocks visibility and creates a safety hazard.



Figure 33. Students rushing to cross Vosseller at an unmarked crosswalk.



Figure 34. Looking south on Vosseller Avenue, the residential construction site can be seen on the left.



Figure 35. Sign allowing parking on Vosseller Avenue. A parked car at this location would require vehicles to cross the double yellow line.

Vosseller Avenue and West Union Avenue

The intersection of Vosseller Avenue and Union Avenue is signalized. Approaching Union Avenue, Vosseller splits to the right, allowing vehicles turning right to bypass the signalized intersection. Vehicles entering Vosseller from the west can also use this roadway to make a left turn prior to the signal. The team did observe traffic forming a queue to wait for the signal, with vehicles blocking the pre-intersection (Figure 36).

The intersection has high-visibility crosswalks and ADA-compliant curb ramps, although a puddle was observed at the base of one of them (Figure 37). A crossing guard was posted during the observation.

As this intersection is managed by NJDOT, the walk audit does not include a detailed description of the roadway.



Figure 36. Line of vehicles waiting for the Union Avenue intersections.



Figure 37. Looking south across Union Avenue. There is no crosswalk for pedestrians or bicyclists.

Recommendations

During the workshop, participants expressed the desire to encourage and support walking and bicycling throughout the corridor, and to improve safety for those already walking and biking. These recommendations are intended to support those efforts.

I. Adopt a Complete Streets Ordinance

Adopting a Complete Streets policy, as Bound Brook did in 2015, is an important first step toward implementing Complete Streets, as it defines their meaning, establishes goals, and lays out the ways in which the municipality will accomplish its goals. A next step is to establish an implementation plan or checklist, which can help to ensure that the municipality remains on the right path year after year. In 2019, NJDOT released an updated guide on how to create an implementation plan and a new template for a Complete Streets resolution. Bound Brook is encouraged to use NJDOT's Complete & Green Streets for All: Model Complete Streets Policy and Guide to update the municipal policy to the latest standard and add an implementation plan (https://www.state.nj.us/transportation/eng/completestreets/pdf/CS_Model_Policy_2019.pdf). Bound Brook can further strengthen the Complete Streets policy by adopting it as an ordinance.

2. Improve Crosswalks and Sidewalks

The neighborhood surrounding the study corridor is well suited for walking, thanks to the interconnected nature of its streets and proximity to the high school, elementary school, downtown commercial district, and nearby train station. However, unmaintained or narrow sidewalks make walking challenging in several locations along the route.

Sidewalks should be rebuilt in sections where they have deteriorated and are no longer accessible, to provide a continuous pedestrian route (Figure 38). If possible, they should be widened to better allow pedestrians the ability to walk side-by-side. Curb ramps along Maple Avenue that are not ADA-compliant should be replaced, with ramps added at t-intersections to create compliant crosswalks. Drainage issues at the curb ramps can also be addressed at this time.



Figure 38. Crosswalks and ramps should be updated to match the intersection of Maple and Thompson.

Crosswalk visibility can be improved in several ways. Standard parallel crosswalks are found throughout the corridor, but continental or ladder crosswalks are easier to see at greater distances by drivers. At some locations, such as Vosseller Avenue and Cherry Avenue, a marked crosswalk should be installed.

Rectangular Rapid Flashing Beacons (RRFBs) can be used at unsignalized crosswalks to enhance visibility. These installations would be especially helpful along Vosseller Avenue, where vehicles do not have a stop sign or signal for 0.6 miles. Pedestrians push a button to activate the RRFB, which can be seen from a distance by drivers. Crosswalks should be well-lit with light fixtures above both ends of the crosswalk to ensure visibility at night. The Borough should work with homeowners to replace previously removed street trees along the corridor.

3. Address Parking Violations and Signage

Vehicles parked too close to intersections were observed at some locations along the study corridor. At a minimum, “No Parking From Here to Corner” signage should be added where it is currently missing or faded. Additional steps can be taken to make it clear to drivers where parking isn’t allowed. Curb extensions benefit pedestrians and provide a physical impediment to illegal parking, improving visibility for all roadway users. In the short term, curb extensions can be added using paint and plastic bollards (Figure 39).



Figure 39. Painted curb extension in Belleville, NJ.

Curb extensions can be upgraded to be a concrete extension of the sidewalk and include green infrastructure such as water retention basins (rain gardens). In locations where curb extensions are not possible, the no parking area should be supplemented with diagonal striping to make it clear that parking is prohibited.

4. Add Bicycle Facilities

Vosseller Avenue is 30-feet wide, with two 15-foot lanes. Currently, only a short section, in front of the swim academy allows street parking. By eliminating this parking, 4-foot shoulders can be added to provide a space for less confident cyclists. Alternatively, the roadway can be restriped with two 10-foot travel lanes and two standard 5-foot bike lanes, although this configuration would not provide the 11-foot standard lane width specified by Somerset County.

Maple Avenue is not wide enough to accommodate bicycle lanes without removing parking, which is well used in this area. Instead, the municipality can add shared-lane markings (sharrows) to the length of Maple Avenue to remind motorists to expect bicyclists and to share the roadway. While these recommendations illustrate potential bicycle facilities within the study area, on-street bicycle accommodations should ideally be installed as part of a corridor or network to help residents and visitors get where they need to go. Further study would be required.



Figure 40. Proposed recommendations, including bicycle lanes, shared lane markings, curb extensions, high-visibility crosswalks, and RRFBs.

5. Encourage Active Transportation

Education is an essential element in creating safer streets for all users. Bound Brook has worked closely with NJ Safe Routes to School (SRTS) and RideWise TMA to develop programs that provide educational opportunities for youth and parents. Continuing to encourage walking and bicycling as safe options for students would help with traffic flow and improve safety along the corridor.

During the WCW, participants proposed an off-site drop-off and pick-up location to help reduce traffic volumes in the area surrounding the school. When selecting a site, officials should try to steer traffic away from already congested areas such as the intersection of Maple Avenue and Vosseller Avenue.

Many of the events and activities described here would qualify Bound Brook for consideration in the NJ Safe Routes to School Recognition Program. Municipalities and schools that meet the requirements for the NJ Safe Routes to School Recognition Program can also earn points toward Sustainable Jersey and Sustainable Jersey for Schools certification. More information can be found on the NJ Safe Routes to School website (<http://www.saferoutesnj.org/levels/>; <http://www.saferoutesnj.org/sustainable-jersey-and-sustainable-jersey-for-schools-actions/>).

6. Conduct a Speed Study

The study team noted that drivers appear to be exceeding the speed limit and walk audit participants stated concerns about drivers speeding at night. Bound Brook should conduct a speed study, working with their police department, their local transportation management association RideWise, or their municipal engineer, to determine the presence and severity of speeding in the study area.

7. Investigate a Four-Way Stop

The intersection of Vosseller Avenue and Maple Avenue currently has a two-way stop control, where Vosseller Avenue has the right-of-way. A four-way stop, requiring vehicles on Vosseller Avenue to stop at all times, would significantly increase the safety of pedestrians crossing the roadway at the intersection. However, adding a stop control will require an engineering study of traffic conditions, pedestrian characteristics, and physical characteristics of the location to determine whether the change is warranted.

Conclusion

The roads included in this report provide an important connection between community schools, surrounding residential areas, and the downtown commercial district. The streets can be transformed into a gateway to the center of town for motorists, pedestrians, and bicyclists by better balancing the needs of each travel mode.

Local officials interested in improving their streets 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 audit.

High-visibility crosswalks, curb extensions, bicycle lanes, and continuous sidewalks, could greatly improve the walkability and bikeability of the area while encouraging more people to walk and bike for transportation. Demonstration projects can be deployed to test out the suitability of various recommendations for changes on municipal roadways along the corridor.



Appendix

A. Workshop Flyers

B. Workshop Agenda and Field Audit Form

C. Potential Funding Resources

D. Design Resources

A. Workshop Flyers



WALKABLE COMMUNITY WORKSHOP

Thursday, October 6, 2022, 1:00 pm to 4:00 pm
Recreation Center, 200 Thompson Ave., Bound Brook

Join us to address walkability on Vosseller Avenue and W. Maple Avenue!

To register visit: <https://go.rutgers.edu/boundbrook>

WORKSHOP AGENDA

- 1:00 pm
Welcome and Walkable Community Presentation
- 2:00 pm
Walking Audit
- 3:30 pm
Debrief and Next Steps
- 4:00 pm
Adjourn

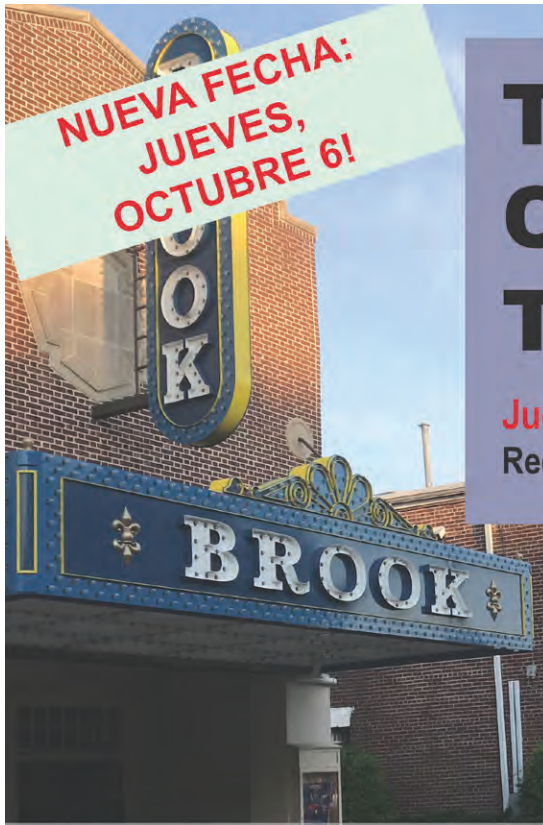


Bound Brook wants to make Vosseller Avenue safer!

A Walkability Workshop engages borough employees, residents, and businesses on issues regarding walking and biking. After learning about 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 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.





**NUEVA FECHA:
JUEVES,
OCTUBRE 6!**

Taller Práctico: Comunidades Transitables

Jueves, octubre 6, 2022, 1:00 pm a 4:00 pm
Recreation Center, 200 Thompson Ave., Bound Brook

Únase a nosotros para abordar la
accesibilidad para peatones en Vosseller
Avenue y W. Maple Avenue!

Para registrarse, visite: <https://go.rutgers.edu/boundbrook>

AGENDA DEL TALLER

- 1:00 pm
Bienvenida y presentación
- 2:00 pm
Auditoria a pie
- 3:30 pm
Informe y próximos pasos
- 4:00 pm
Finalizar sesión



¡Bound Brook quiere que Vosseller Avenue sea más segura!

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 un corredor de media milla evaluando sus calles y aceras existentes e identificar los problemas a superar para garantizar condiciones más seguras 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..



B. Field Audit Form



RUTGERS

Vosseller Ave. and W. Maple Ave. Walking Audit

Bound Brook, NJ

October 2022



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: Vosseller Ave. Between Cherry Ave. and W. Maple Ave.

Please indicate how you feel about the following questions:

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: Vosseller Ave. Between W. Maple Ave. and W. Union Ave.

Please indicate how you feel about the following questions:

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: W. Maple Ave. between Thompson Ave. and Marion St.

Please indicate how you feel about the following questions:

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: _____

C. 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](https://www.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.sustainablejerschools.com/>

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:

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

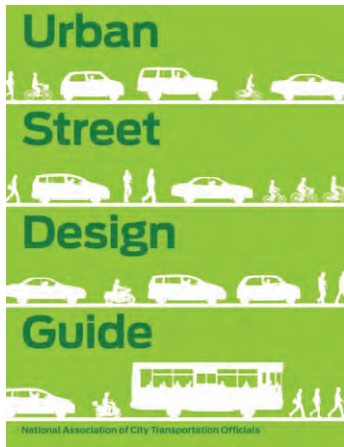
New Jersey Transportation Infrastructure Bank (NJTIB): The NJTIB is an independent State Financing Authority responsible for providing and administering low interest rate loans to qualified municipalities, counties, and regional authorities in New Jersey. The unique partnership with NJDOT was established 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.

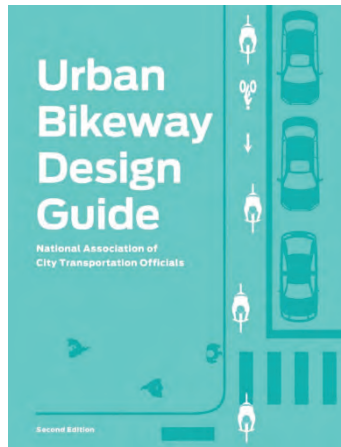
County and Municipal Open Space Trust Funds: All New Jersey counties and many New Jersey municipalities have an Open Space Trust Fund, which is a dedicated program supporting open space land acquisition. The trust funds are established by ballot measure. Depending on the fund parameters, other development 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>

D. Design Resources

NACTO Guides



[Urban Street Design Guide](#)



[Urban Bikeway Design Guide](#)



[Transit Street Design Guide](#)



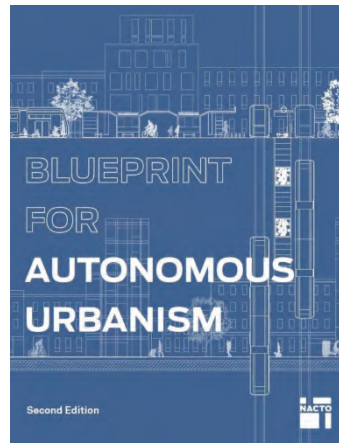
[Urban Street Stormwater Guide](#)



[Global Street Design Guide](#)



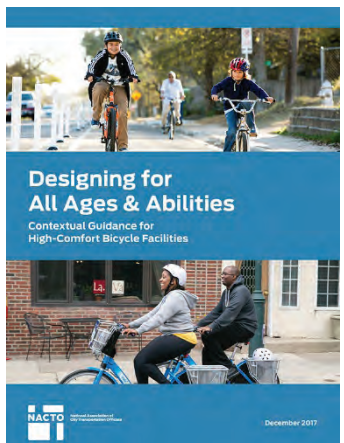
[Designing Streets for Kids](#)



[Blueprint for Autonomous Urbanism](#)



[Bike Share Station Siting Guide](#)



[Designing for All Ages & Abilities](#)



[Don't Give Up at the Intersection](#)

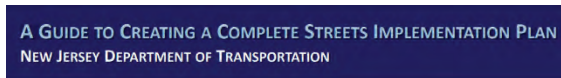
NJDOT Guides



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



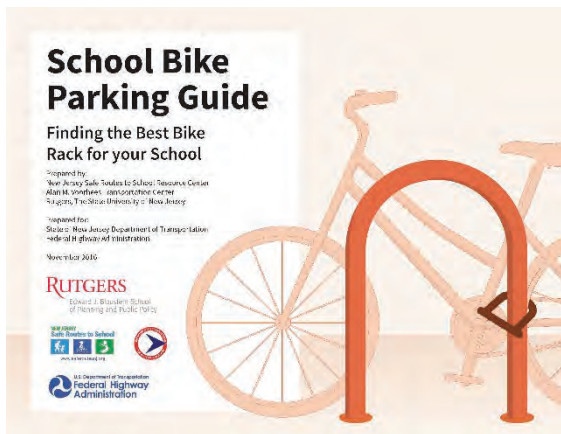
[2017 State of New Jersey Complete Streets Design Guide](#)



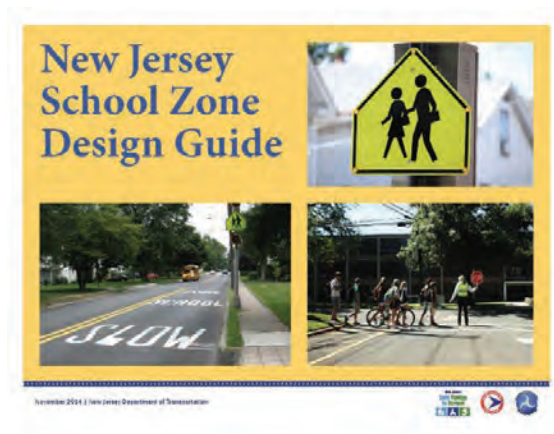
[A Guide to Creating a Complete Streets Implementation Plan](#)



[A Guide to Policy Development](#)



[School Bicycle Parking Guide](#)



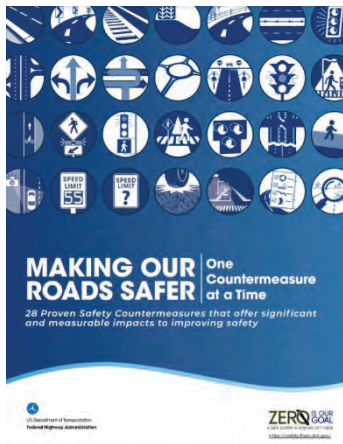
[New Jersey School Zone Design Guide](#)

ADA Guidelines



[ADA Standards for Accessible Design](#)

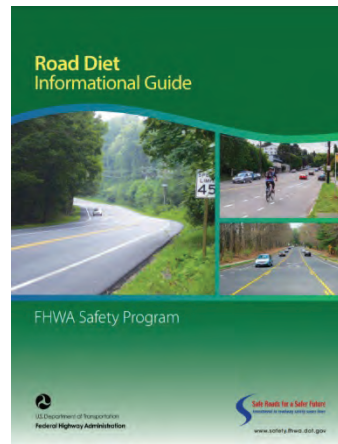
FHWA Guides



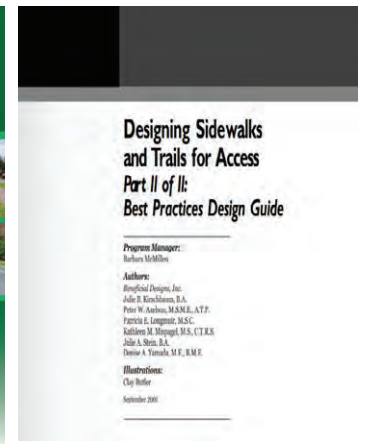
[Making Our Roads Safer: One Countermeasure at a Time](#)



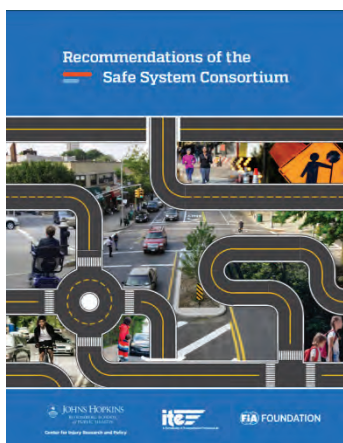
[Separated Bike Lane Planning and Design Guide](#)



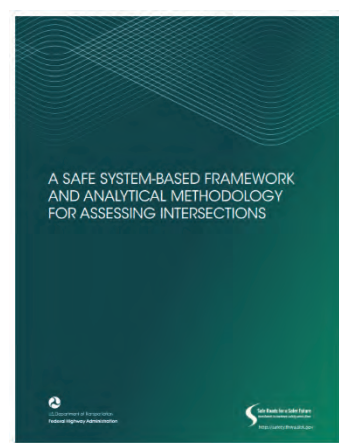
[Road Diet Informational Guide](#)



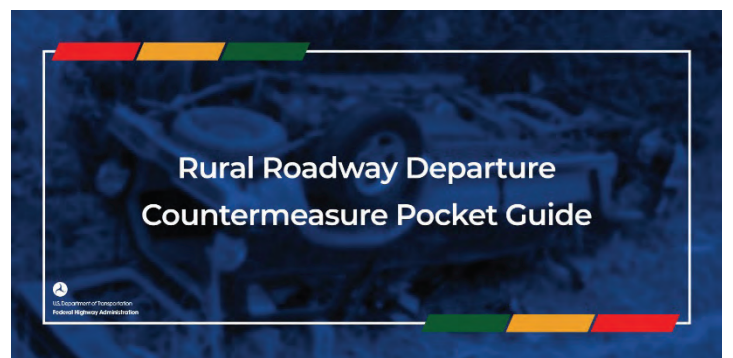
[Designing Sidewalks and Trails for Access Part II of II: Best Practices Design Guide](#)



[Recommendations of the Safe System Consortium](#)

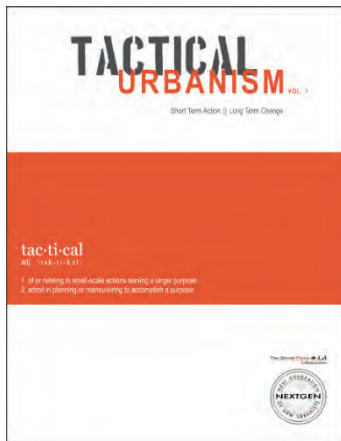


[A Safe System-Based Framework and Analytical Methodology for Assessing Intersections](#)

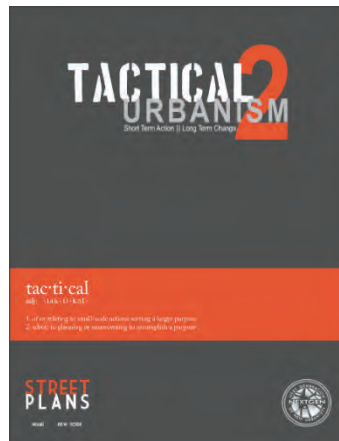


[Rural Roadway Departure Countermeasure Pocket Guide](#)

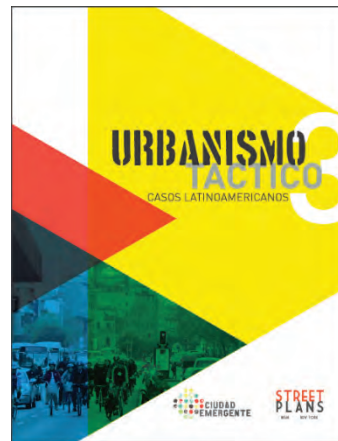
Tactical Urbanism Guides



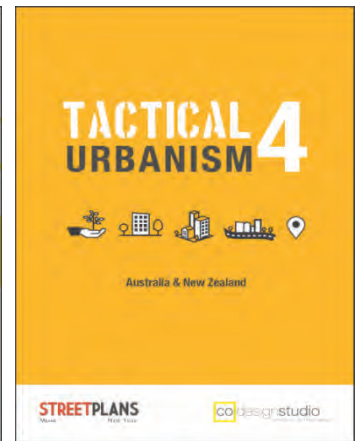
[Tactical Urbanism 1](#)



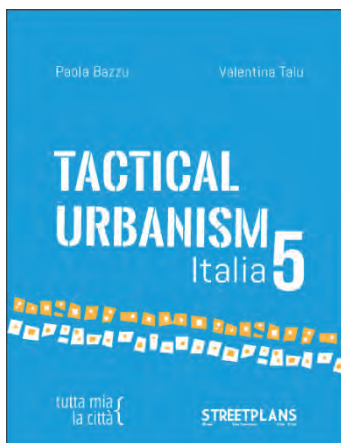
[Tactical Urbanism 2](#)



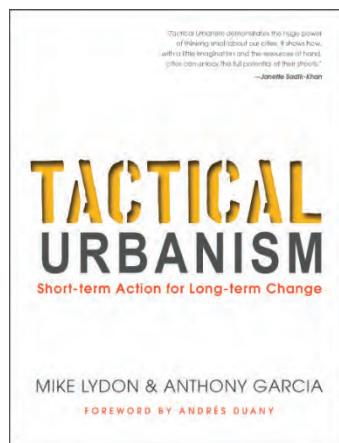
[Tactical Urbanism 3](#)



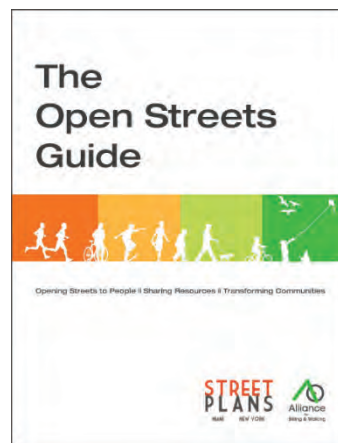
[Tactical Urbanism 4](#)



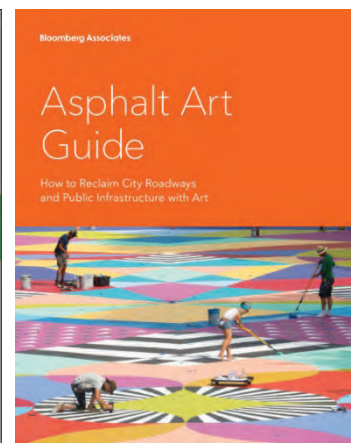
[Tactical Urbanism 5](#)



[Tactical Urbanism: The Book](#)



[The Open Streets Guide](#)



[Asphalt Art Guide](#)



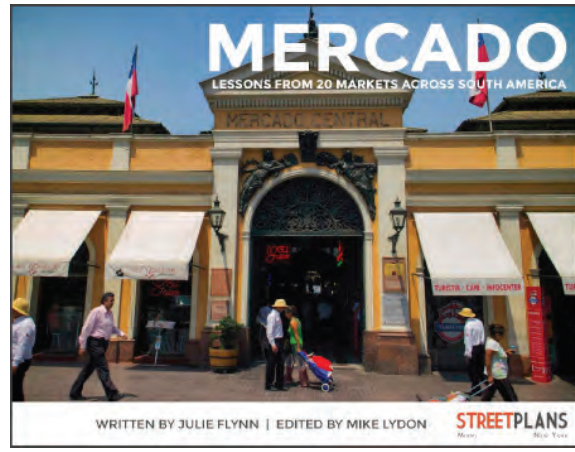
[Tactical Urbanist's Guide to Materials and Design](#)



[Fast-Track: A Tactical Transit Study](#)



[Public Space Stewardship Guide](#)



[Mercado: Lessons from 20 Markets Across South America](#)

