



Belleville High School Safer Streets Plan

Belleville, Essex County, NJ

2025



About the Report

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

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

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Figure 1. Belleville High School.

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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 Township of Belleville, New Jersey, participated in the 2024–2025 North Jersey Transportation Planning Authority (NJTPA) Complete Streets Technical Assistance (CSTA) Program. Technical assistance included the analysis of four roads (Division Avenue, Joralemon Street, Passaic Avenue, and Greylock Parkway) surrounding Belleville High School and the design and coordination of a temporary bike lane demonstration on Division Avenue in October 2024. Both components were a collaborative effort with municipal employees, school district officials, and Township stakeholders. Officials and residents are interested in making it safer and easier to walk and bike to the school and the Municipal Stadium, and to reduce congestion and speeding around the school, particularly during school drop off and pickup and during school and community events.

This report summarizes the implementation of a temporary bicycle lane demonstration and the feedback provided by community members that was collected through an online survey. This report identifies several recommendations to make it safer and more comfortable for non-motorists to travel to and around Belleville High School by walking and biking, e-scooters, skateboards, or other forms of human-powered travel, taking into consideration observations made during two field visits, as well as input received through the online survey (Figure 2).

This report calls for: lowering vehicle speeds and improving comfort and safety for all by building "bicycle boulevards;" enhancing pedestrian safety by adding curb extensions; providing and maintaining high-quality pedestrian infrastructure; and adding lighting.

The lessons learned during the demonstration and roadway analysis can be applied to other roadways in Belleville. Appendices in the report include outreach materials, temporary demonstration designs, the online questionnaire, and a list of potential funding resources.



Figure 2. Division Avenue.

Background

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

Belleville requested technical assistance to address congestion and traffic safety concerns around Belleville High School. Traffic from student drop off and pickup creates congestion and a safety concern before and after school. This is especially true when the school hosts public events like fairs and sports. While almost all roads in town have sidewalks, there is no dedicated bicycle infrastructure.

One of the goals for the project is to explore potential road improvements that will encourage more residents to walk, bike, or scooter instead of driving to the school and stadium (Figure 3). Safety is an issue along these corridors at all hours. Belleville is concerned about drivers exceeding the speed limit or parking illegally, which blocks visibility. Over the past six years, ten crashes involving school-aged youths have occurred in the study area. In addition, just outside the study area, the New Jersey Department of Environmental Protection is currently building The Greenway. Once it opens, it is anticipated that people will walk and bike to it from the surrounding neighborhoods.

The CSTA team met with Belleville and school staff to discuss which roadways around Belleville High School should be prioritized. The CSTA team then looked at existing conditions on a block-by-block basis to determine which safety improvements were feasible.

Belleville previously worked with the CSTA program to design and install a temporary demonstration project adjacent to Belleville Middle School (Figure 4)¹. That project involved painted sidewalk extensions and a mural designed by a local artist. To build on that experience, Belleville officials requested a demonstration of bicycle infrastructure. As part of this project, the team designed and installed a two-way protected bicycle lane adjacent to the high school. This allowed students and residents the opportunity to experience first-hand what a dedicated bicycle facility could look like in Belleville, and to provide feedback via an online questionnaire.



Figure 3. Bicycles parked at the High School.



Figure 4. 2022 demonstration at Belleville Middle School.

1. <https://njbikeped.org/belleville-pedestrian-safety-demonstration-project-2023/>

What is a Complete & Green Street?

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

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

Complete Streets should tailor the road to the specific needs of the surrounding environment. A school zone, for instance, may require reduced speed limits, narrower travel lanes, and wider sidewalks to achieve a safer setting for students. Meanwhile, streets along transit routes should accommodate the needs of commuters with benches, shelters, lighting, and signs (Figure 5).

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

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

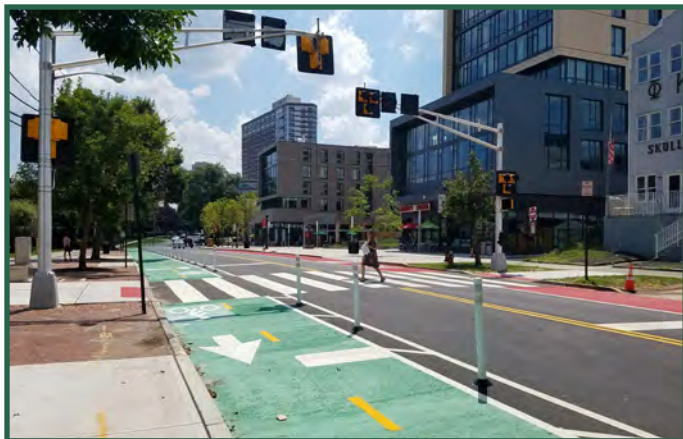


Figure 5. This Complete Street in New Brunswick, NJ, features a bicycle path, bus lane, and enhanced pedestrian crossing.

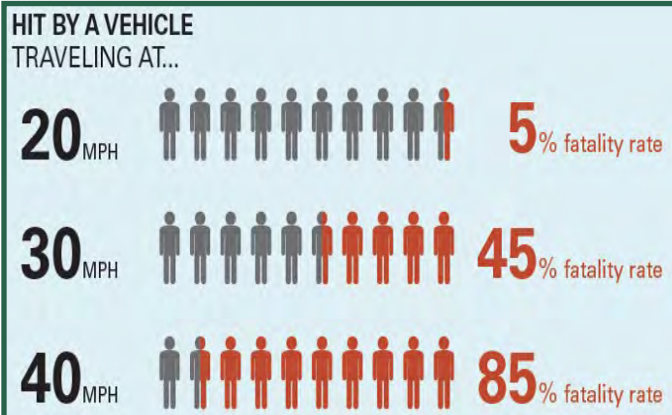


Figure 6. Graphic showing increased fatality rate as vehicle speeds increase. (USDOT)

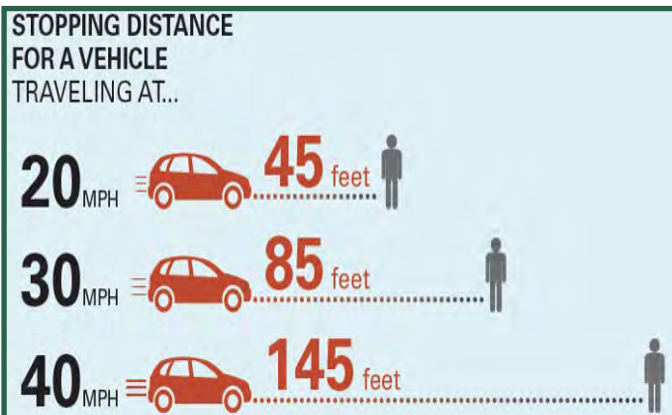


Figure 7. Graphic showing increased stopping distance as vehicle speeds increase. (USDOT)

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 8). 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 8. 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 9). 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 9. Division Street in Somerville was converted into a popular pedestrian plaza.

Transportation Equity

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

Complete Streets in Belleville and New Jersey

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. Since 2009, NJDOT has funded seven Complete Streets Summits and more than a dozen local, regional, and statewide in-person and online educational workshops intended to disseminate the latest information about Complete Streets to planners, engineers, elected officials, and advocates. In 2017, NJDOT released the New Jersey Complete Streets Design Guide to inform New Jersey communities on how to implement Complete Streets projects. In 2019 (with updates in 2020), NJDOT released the Complete & Green Streets for All: Model Complete Streets Policy and Guide to serve as a resource for local best practices in policy language. One of the positive outcomes of these efforts is that communities of all sizes throughout the state have joined NJDOT in adopting Complete Streets policies. Of New Jersey's 21 counties, eight have adopted Complete Streets policies. Additionally, 182 municipalities have implemented their own policies (Figure 10). In November 2024, NJDOT updated its internal policy and checklists².

Both Essex County and Belleville have Complete Streets policies. Belleville's policy from 2022 is based off the NJDOT model policy.

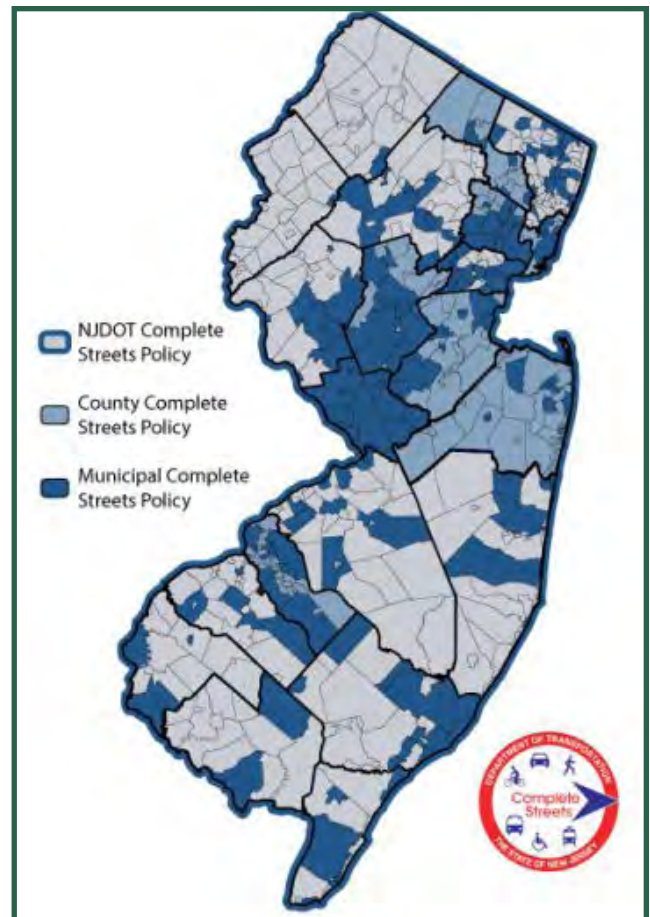


Figure 10. Complete Streets Policies in New Jersey, as of April 15, 2025. Visit <https://njbikeped.org/nj-complete-streets-policy-compilation/> for an up-to-date list of policies.

What is a Temporary Demonstration Project?

Demonstration projects are an approach to neighborhood building that uses short-term, low-cost, scalable Complete Streets interventions to affect long-term change related to street safety and public space. This approach can draw attention to perceived shortcomings of the current roadway design, widen public engagement, test interventions, and inspire action.

Demonstration projects allow communities to quickly make high-priority safety and livability improvements. They also provide flexibility due to the temporary nature of improvements. Rather than debating the costs and benefits of a curb extension, a municipality can paint one and observe the new dynamic between pedestrians and drivers without committing to a permanent change. They allow for the collection of operational data and community feedback that can be used to refine the final permanent design (Figure 11).

Demonstration projects can be used to spur conversation around neighborhood improvements, allowing residents to evaluate potential changes before permanent installation. The projects can be used to solicit local ideas to address planning challenges, taking the debate out of city hall and placing it on the street where people can experience and respond to the proposed changes.



Figure 11. A demonstration project in Verona, NJ created during a CSTA project.

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

Best Practices in Demonstration Projects

Successful demonstration projects employ low risks for high returns, inspiring people to think differently about their surroundings. For example, painting curb extensions enables residents to experience safer, more visible street crossings and provide input for permanent implementation. Beyond function, demonstration projects may provide aesthetic improvements through the installation of planters and art. Examples of demonstration projects in New Jersey include:

Painted Curb Extensions

Maintaining visibility at intersections can improve safety outcomes for all roadway users. While New Jersey law prohibits parking within 25 feet of a corner for visibility, this regulation is frequently violated. In 2017, the City of Jersey City engaged planning consultants to conduct a series of six walkability workshops. The workshops included a public-feedback board, tables and chairs, wayfinding signage, planters, and colorful paint (Figure 12). By shortening the crossing distance for pedestrians, curb extensions provide a tangible experience of potential safety improvements, allowing participants to offer input for future implementation. Temporary curb extensions are now part of the municipal toolkit and have been installed throughout the city.



Figure 12. Painted curb extensions in Jersey City. Photo by Street Plans.

Pedestrian Malls

In 2015, Jersey City created a new pedestrian plaza on Newark Avenue using planters, paint, tables, and chairs. One of the major concerns about pedestrianizing a roadway was how a plaza would affect many businesses, both in terms of visibility from drivers and being able to receive deliveries. The temporary demonstration project allowed all stakeholders to view the results with the understanding that the design is fully reversible, if needed.

However, the temporary plaza was very successful, and in 2021, the city completed a permanent plaza with stone pavers, larger planters, enhanced lighting, benches, pedestrian safety bollards, and other public space features (Figure 13).

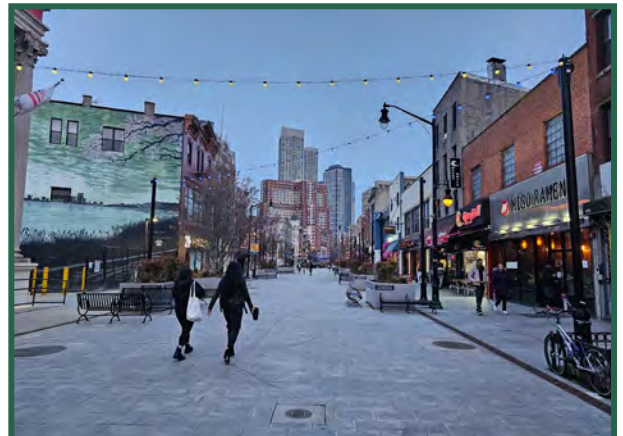


Figure 13. Originally a demonstration project, the Newark Avenue pedestrian plaza is now a permanent installation.



Figure 14. Bicyclists navigating the temporary on-road bicycle lane in Keyport, NJ. Photos by NJTPA.

Temporary Bicycle Lanes

As part of the creation of a Complete Streets Policy and Implementation Plan funded by the NJTPA, Keyport Borough and Monmouth County constructed a temporary two-way bike lane and crosswalk at the intersection of Maple Place, Atlantic Street, and Church Street. The project aimed to calm traffic, increase the visibility of pedestrians and bicyclists to motorists at the intersection, and create safe access to the nearby Henry Hudson Trail (Figure 14).

Project Location and Assessment of Need

According to the 2020 US Census, Belleville is home to approximately 38,222 residents within an area of 3.3 square miles. The median age is 40.1, and the estimated median household income is \$85,812. The median home value is \$361,200, which is less than the state median. The number of bicycle commuters in Belleville has decreased from 0.1 percent in 2015 to zero percent in 2020, although that data is affected by the COVID-19 pandemic and does not include non-commute trips (nor travel to school by children). Seventy-two percent of residents drive alone to work, while 2.8 percent walk to work. The population in Belleville is majority Hispanic (52 percent). About 45 percent of the population aged five years and over speak Spanish at home, which is higher than the state average.

Belleville High School is located in a residential neighborhood with an irregular street network. For this project, Belleville officials requested that four roadways be studied (Figure 15):

- Division Avenue from Union Avenue to Passaic Avenue (red)
- Joralemon Street from Union Avenue to Passaic Avenue (blue)
- Passaic Avenue from Joralemon Street to Greylock Parkway (pink)
- Greylock Parkway from Union Avenue to Passaic Avenue (green)

The irregular roadway grid, in part caused by the topography of the area, pushes traffic to a limited number of roads. Washington Avenue (NJ 7), which is located east of the study area, is the primary north-south corridor through Belleville. Union Avenue provides an alternative, and as such, is busy. Both Greylock Parkway and Joralemon Street connect with Washington Avenue and are important east-west corridors through the Township. Detailed descriptions of each roadway can be found in the [Recommendations](#) section.

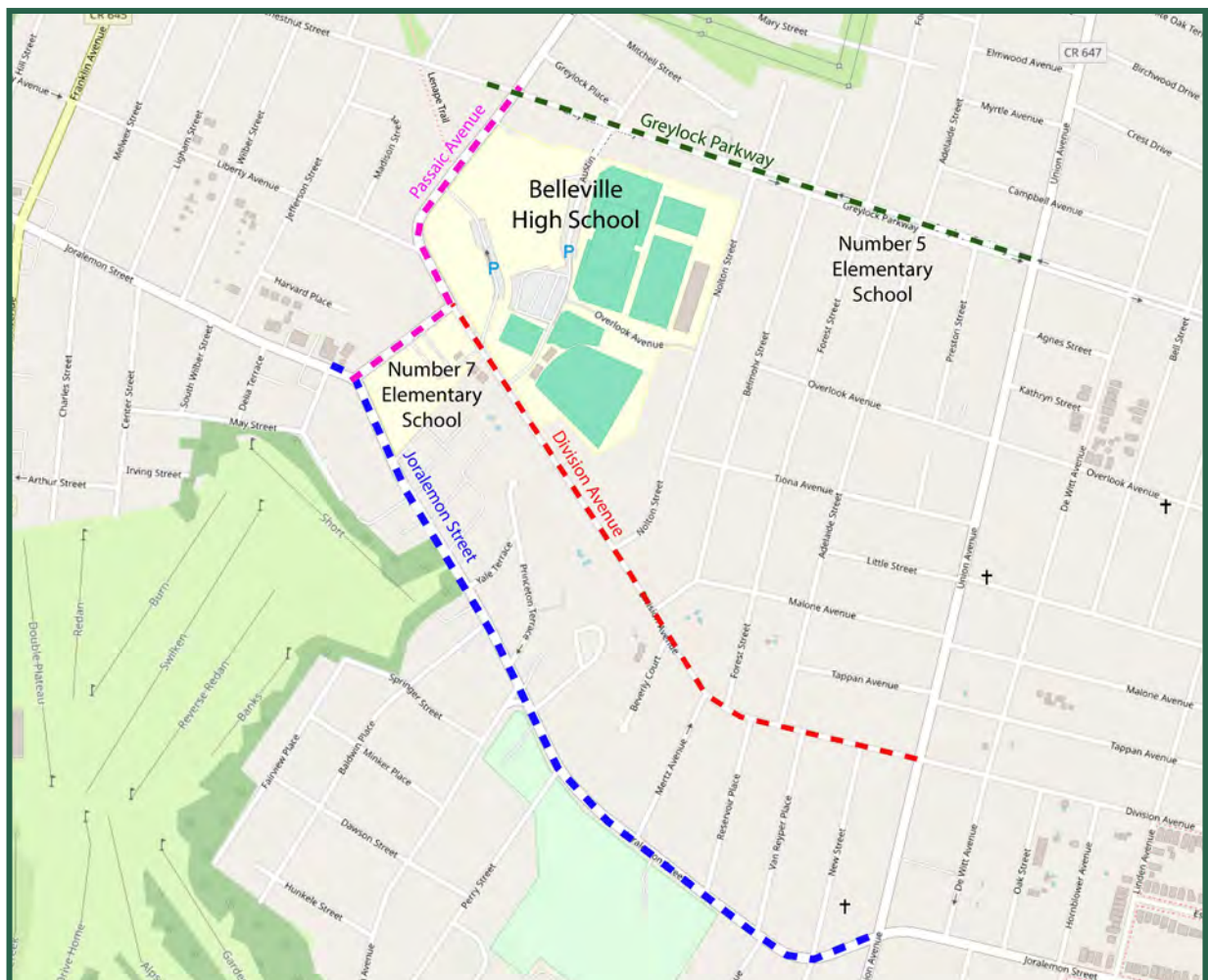


Figure 15. Map of study corridors.

Traffic Volumes, Speed, and Crash History

The Belleville Police Department assisted the project team by providing traffic and speed counts for the study corridors (Table 1).

All roads in the study area have a speed limit of 25 mph. Speed data was collected at multiple locations between April and May 2024. The data found that the 85th percentile speed was consistently above the speed limit on all four corridors. The 85th percentile speed is the speed at which the majority of drivers (85 percent) travel at, or below, on a road segment. If the 85th percentile speed is appreciably greater than the posted speed limit, and the roadway context does not support setting a higher speed limit (as in this case), then traffic calming measures and additional traffic enforcement may be warranted.

Table 1. Traffic volumes and speeds in study area, Spring 2024.

Roadway	Roadway Width (feet)	Speed Limit (mph)	Average Speed (mph)	85th Percentile Speed (mph)	Annual Average Daily Traffic
Division Avenue	30–36	25	21.0 (eastbound)	27.4 (eastbound)	3,600
Joralemon Street	36–40	25	25.2 (eastbound) 27.3 (westbound)	30.8 (eastbound) 31.6 (westbound)	7,500
Passaic Avenue	30–36	25	22.8 (northbound) 23.0 (southbound)	28.0 (northbound) 28.5 (southbound)	5,000
Greylock Parkway	38–40	25	24.3 (eastbound) 22.6 (westbound)	31.4 (eastbound) 30.3 (westbound)	8,000

Source - Belleville Police Department

According to NJDOT crash data posted on their crash analysis website, Safety Voyager, from 2018–2023, there were six reported crashes involving bicyclists and 10 involving a pedestrian along the study corridors (Table 2). The majority (63 percent) involved a school-aged victim. Fortunately, there were no fatalities. Six of the crashes occurred on Division Avenue, which has the lowest vehicle volumes but is a popular route for walking and bicycling to the school. Eight crashes happened on Jorelemon Street and two on Greylock Parkway. Five of those crashes occurred at intersections with Union Street, a county roadway that was not analyzed for this project.



Figure 16. One of the crashes occurred at an intersection with a crossing guard.

Table 2. Pedestrian and bicycle crashes in study area, 2018–2024.

Location	Date	Time	Crash Type	Ped./Cyclist Age	Injury Severity	At Intersection	Lighting Condition
Division Avenue and Passaic Avenue	6/25/2023	4:51 pm	Bicyclist	9	Moderate Injury	Yes	Daylight
Division Avenue and Nolton Street	6/03/2023	5:14 pm	Pedestrian	24	Possible Injury	No	Daylight
Division Avenue and Union Street	4/21/2023	8:33 am	Pedestrian	17	Moderate Injury	Yes	Daylight
Division Avenue and Belmohr Street	4/11/2023	11:47 am	Bicyclist	15	Unknown	Yes	Daylight
Division Avenue and Union Street	1/17/2023	3:34 pm	Bicyclist	14	Moderate Injury	Yes	Daylight
Division Avenue and Union Street	8/17/2018	1:39 pm	Bicyclist	15	Moderate Injury	Yes	Daylight
Greylock Parkway and Nolton Street	9/26/2023	5:50 pm	Pedestrian	12	Incapacitated	No	Daylight
Greylock Parkway and Nolton Street	7/1/2019	8:56 am	Pedestrian	18	Possible Injury	Yes	Daylight
Joralemon Street and Yale Terrace	12/08/2023	6:14 pm	Pedestrian	57	Complaint of Pain	Yes	Dark (Streetlights on)
Joralemon Street and Garden Avenue	6/7/2023	10:25 am	Bicyclist	14	Moderate Injury	Yes	Daylight
Joralemon Street and Garden Avenue	5/13/2021	9:03 am	Pedestrian	13	Complaint of Pain	Yes	Daylight
Joralemon Street and New Street	8/11/2020	9:14 pm	Pedestrian	57	Complaint of Pain	Yes	Dark (Streetlights on)
Joralemon Street and Union Street	01/02/2020	7:07 am	Pedestrian	50	Complaint of Pain	Yes	Daylight
Joralemon Street and New Street	4/22/2019	3:03 pm	Pedestrian	15	Moderate Injury	Yes	Daylight
Joralemon Street and Union Street	6/10/2018	11:27 pm	Bicyclist	38	Unknown	Yes	Dark (Streetlights on)
Joralemon Street and Perry Street	5/16/2018	1:28 pm	Pedestrian	70	Unknown	Yes	Daylight

Source - Safety Voyager

Project Methodology

Scoping

Prior to conducting the demonstration project and corridor analysis, the CSTA project team met virtually with Belleville officials to discuss the traffic safety concerns and gain a better understanding of the major roadways, use, and appropriateness for a temporary demonstration project. An initial site visit was conducted on May 8, 2024, to assess the feasibility of a demonstration project on one of the roadways (Figure 17). The project team then developed initial diagrams and met virtually with Belleville officials to discuss options. Based on the constraints documented during the site visit, Division Avenue was selected for a two-way bicycle path that would be on the ground for around a week. The demonstration was developed with the understanding that the design may not be suitable for permanent installation at this location, but the project would help Belleville to educate residents about bike facilities, collect community feedback, and develop internal competency on quick-build installations that could be trialed in other parts of town.



Figure 17. Observing the roadway during the preliminary site visit.

Supporting Materials

The CSTA team provided Belleville with guidance on the installation and design of the project, including the materials needed, usage of a speed radar for pre/post data collection, and Manual on Uniform Traffic Control Devices (MUTCD) requirements for striping and placement of vertical elements³ (Figures 18 and 19—full design plans in Appendix).

Prior to installation, the project team developed outreach materials aimed at residents. Belleville distributed flyers, available in English and Spanish, to residents and shared project details through social media and school mailing lists. The flyer informed community members about the demonstration project and solicited comments through an online survey. The English flyer is found on the next two pages (Figures 20 and 21).

3. [MUTCD CHAPTER 3L. CHANNELIZING DEVICES USED FOR EMPHASIS OF PAVEMENT MARKING PATTERNS](#)

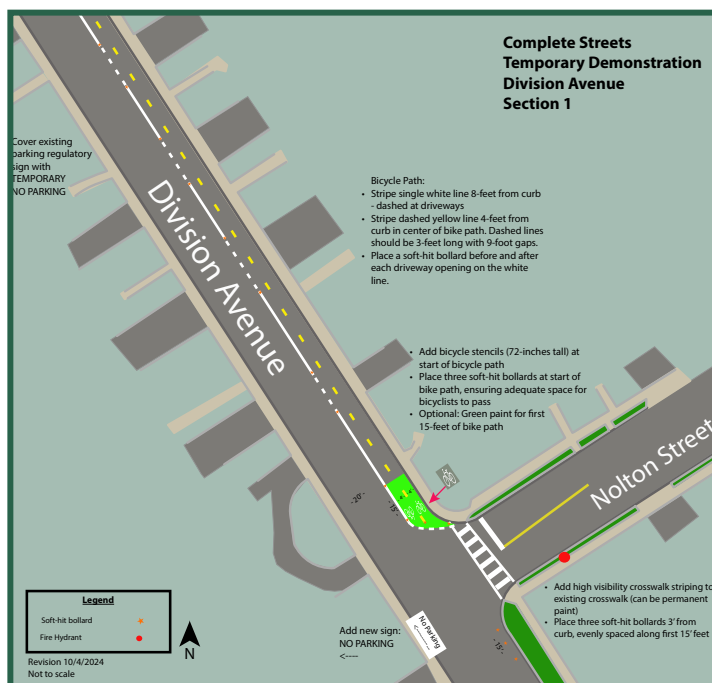


Figure 18. Design for southern end of Division Avenue.

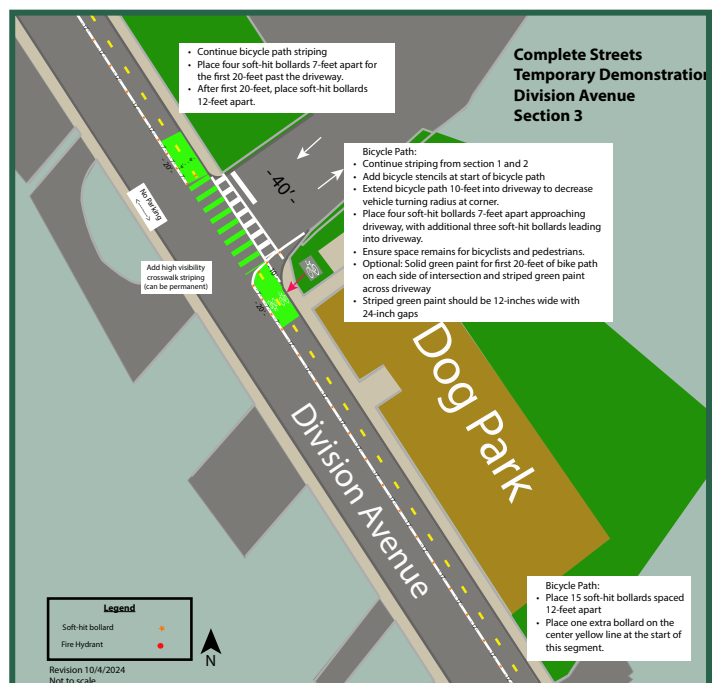


Figure 19. Design for northern end of Division Avenue.

DIVISION AVENUE BICYCLE PATH DEMONSTRATION

Starting October 24, 2024

Belleville wants your input on making Division Avenue safer!

Belleville Township is working on making it safer to walk and bicycle to Belleville High School. The Township will be showcasing a temporary bicycle path from October 24 to November 1 and wants to know what **YOU** think!

What is a Temporary Demonstration Project?

A Temporary Demonstration Project is a low-cost way to test out new street designs and get community input before investing in permanent changes. It allows residents and students to see and use the temporary infrastructure instead of relying only on concept images or descriptions.

What will Belleville be testing?

Belleville will be testing a two-way protected bicycle path between Nolton Street and Belleville High School along Division Avenue.

Protected bicycle paths provide a dedicated space for bicyclists to ride, away from motor vehicles and off sidewalks. Separating bicyclists and motor vehicles reduces conflicts that can arise due to the differences in their travel speeds. Bicycle paths have also been found to reduce motor vehicle speeds, increasing safety for all users. Pedestrians may also feel more comfortable with motor vehicle traffic placed further away from the sidewalk.

I live on Division Avenue. Will access to my home change?

Access in and out of your driveway will be maintained. A temporary no parking restriction will be in place during the demonstration period between Nolton Street and Belleville High School. Residents will be permitted to park overnight in the high school parking lot by the tennis courts.

How will the Township make the changes?

As part of this demonstration, temporary paint and signs will be added to delineate the two-way protected bike lane. In addition, plastic posts will be placed to help drivers understand the new traffic pattern.

How long will the demonstration be in place?

The changes will be in place from Thursday, October 24 to Friday, November 1.

How will success be measured?

The team's evaluation will include speed studies, direct observations, and feedback from residents. An online survey will be conducted once the changes are in place.

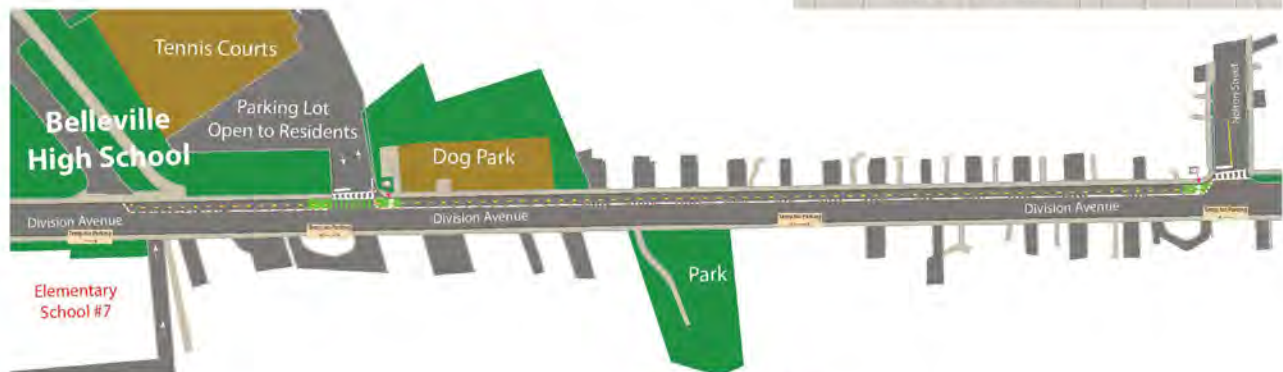
Why is this demonstration happening?

Belleville applied to the Complete Streets Technical Assistance program, a partnership of Rutgers-Voorhees Transportation Center, Sustainable Jersey, and the North Jersey Transportation Planning Authority (NJTPA), to develop a Bicycle Network Plan for the high school neighborhood. The Plan will identify ideas to improve roadway safety around the school and to encourage students and residents to walk and bicycle to the school campus, instead of driving. Shifting school trips away from motor vehicles can help reduce neighborhood congestion and increase quality of life for residents. The demonstration will help Belleville and the project team learn more about transportation needs in the school neighborhood.



Temporary Bicycle Path

A two-way bicycle path, marked with temporary paint and movable plastic posts will be installed on the east side of Division Avenue, between Norton Street and Belleville High School. Parking is currently permitted only on the west side of Division Avenue. During the demonstration, parking will be temporarily prohibited between Norton Street and the high school. Residents are invited to use the high school parking lot by the tennis courts for overnight parking.



Related Events

During the demonstration, EZ Ride Transportation Management Association, Belleville High School, and the Township of Belleville will be hosting a Bike to School Day event on October 30. In addition, a Safety Training class will be held at the high school on November 1 for students.

Project Toolkit

Project materials are being provided by the NJTPA Complete Streets Demonstration Library. The NJTPA created the library to help communities interested in trying out bicycle lanes, corner "bump-outs," and other safety, placemaking, and traffic calming features. To learn more, visit njtpa.org/demolibrary.

PROJECT SCHEDULE

October 24 - Demonstration Starts

October 25 - Online Survey Opens

October 26 - Halloween Spectacular on the Front Lawn of Belleville High School

October 30 - Bike to School Day led by the Belleville Police, Borderline Bikes, and EZ Ride

November 1 - Bike, E-Bike, and E-Scooter Safety Training for High School Students by EZ Ride

November 1 (evening) - Demonstration Ends

Public Input

Once the demonstration is in place, a questionnaire will be made available at <https://go.rutgers.edu/belleville-survey> or by using this QR code.



Questions?

For questions about this project, contact Brian Banda, Township Manager, at 973-450-3407 and bbanda@bellevillenj.org or Matthew Paladino, Belleville School District, at 973-450-3500 and matthew.paladino@bellevilleschools.org.



Township of Belleville
New Jersey



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

Figure 21. Flyer, page 2.

Installation and Evaluation

The Township installed the temporary bicycle lane demonstration on Division Avenue on October 24, 2024. The demonstrations consisted of a two-way bikeway protected with moveable weighted plastic bollards.

The project team solicited help from EZ Ride TMA and a local bike shop, Borderline Bikes, to promote the demonstration. EZ Ride organized a community bike and roll event on October 30, 2024 (Figure 22). Students, residents, local police, and Township staff—including Assistant Principal Emily Pascali—participated (Figure 23). On November 1st, EZ Ride conducted a Safe Skills class at the high school, distributed helmets, and hosted a short community ride on the temporary bike lane (Figures 24–26). This partnership encouraged students to try out the bike lane and created an opportunity to share valuable safety information with the teens.

The demonstration project was in place during the Halloween Spectacular on the front lawn of the High School. This popular event draws attendance from all over the Township, creating an opportunity for residents who don't normally use Division Avenue to view and try the bicycle facility.



Figure 22. Start of the EZ Ride community bike event.



Figure 23. EZ Ride bike event participant try the demonstration.



Figure 24. EZ Ride and Borderline Bikes check student bicycles before a safety demonstration.



Figure 25. EZ Ride conducting safe riding instruction.

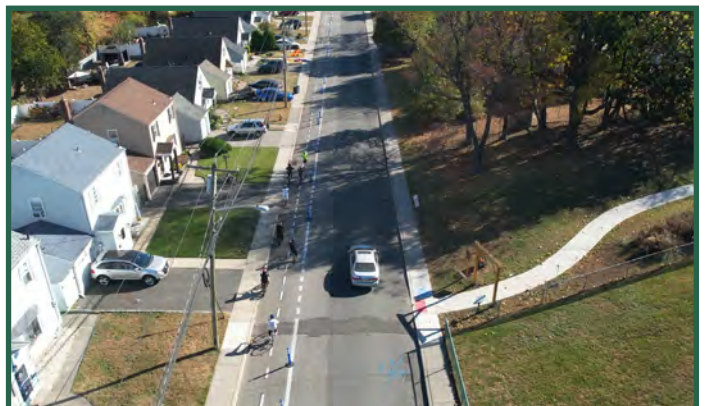


Figure 26. High School students try the demonstration lane.

Questionnaire Feedback

To understand the effects of the demonstration project installed along Division Avenue, an online questionnaire was made available to residents in English and Spanish. The questionnaire was promoted via flyers posted on social media and delivered door-to-door in the project area. The online questionnaire was opened concurrently with the installation of the demonstrations on October 24, 2024, and responses were accepted until November 13, 2024. During that period, 435 responses were received, although not all respondents answered all questions. The following is a summary of results. The English language questionnaire is available in Appendix A.

When interpreting the questionnaire results, it’s important to recognize that changes to a roadway are likely to receive an initial negative response from community members, because change can be disruptive. When considering which recommendations to advance, community leaders should balance the expected safety and mobility benefits with resident concerns.

Existing Traffic Safety Conditions

Residents were asked about their experience with Division Avenue before the demonstration project. They stated that the existing conditions on Division Avenue are not very safe for bicycling, giving the roadway a score of 4.48 out of 10. For all roadway users, participants scored Division Avenue safety a 6.5 out of 10. This indicates agreement that there is a need to address safety.

Perceived Safety of Interventions by Residence of Respondent

Respondents were asked how they believe the demonstration changed safety on Division Avenue for pedestrians, bicyclists, and drivers. Respondents chose between “safer,” “no change,” “less safe,” or “did not experience before change.” The last option was excluded from this analysis. The results of this question are summarized by residency, specifically “Belleville resident, living along Division Avenue,” “Belleville resident, living elsewhere in Belleville,” and “Does not live in Belleville.”

Table 3. Perceived Safety Impact by Resident Group for Bicycle Lane Demonstration.

	For Pedestrians (n = 304)			For Bicyclists (n = 304)			For Drivers (n = 435)		
	Less Safe	No Change	More Safe	Less Safe	No Change	More Safe	Less Safe	No Change	More Safe
Lives in Belleville, on Division Ave.	73%	5%	22%	34%	23%	43%	92%	5%	3%
Lives in Belleville, NOT on Division Ave.	56%	14%	30%	32%	20%	49%	86%	7%	7%
Does Not Live in Belleville	42%	28%	29%	21%	30%	49%	66%	14%	20%
Overall	54%	17%	29%	30%	22%	48%	82%	8%	10%

Residents living along Division Avenue felt that the demonstration resulted in less safety. In particular, 92 percent stated that it made the roadway less safe for drivers.. Residents living along Division Avenue also stated that the demonstration decreased safety for pedestrians, even though no changes were made to the sidewalk. Overall, 48 percent of respondents stated that the demonstration was safer for bicyclists, with the rest split between "less safe" and "no change."

Should the changes be made permanent?

Respondents were asked if they think each change should be permanent, with the choices being “yes” or “no.” Eighty-one percent of respondents stated that it should not be made permanent. The questionnaire also asked if a protected bicycle lane should be tried elsewhere in Belleville. Forty percent of respondents said “yes” to that question.

Written Responses

Throughout the questionnaire, written responses were collected to gather details about respondents' concerns, comments, and recommendations. Concerning driver safety, a common theme that emerged was the feeling that the travel lanes had been narrowed, to the detriment of the safety and comfort of drivers.

“It has negatively impacted safety and has reduced the lane of travel severely for cars.”

“I myself have an SUV if another SUV is coming, both cannot pass at the same time, and you would end up having to pull over into the bike lane”

“it’s has made the roads unsafe for motorists as it has narrowed the roads for cars!”

What is interesting about this feedback is that the bicycle lane replaced parking—no change was made to the width of the travel lanes. This confirms that protected bicycle lanes affect how drivers perceive the roadway, and can, in turn, lead to slower speeds as drivers feel that they have less space to maneuver.

Residents were provided with a blank space to give general ideas for how to improve safety around Belleville High School. The most common request was for more traffic and parking enforcement. Specifically, respondents mentioned double parking and speeding creating dangerous situations. For infrastructure, residents would like to see speed bumps, more stop signs, and increased safety at crosswalks through the addition of flashing pedestrian signage and by adding crossing guard hours and/or locations.

Social Media

The project team monitored social media and local news to find additional comments related to the demonstration. One concern that was brought up frequently on social media but not as often in the questionnaire was related to the aesthetics of the demonstration. In particular, some residents felt that the temporary paint and plastic delineators did not match the character of the neighborhood (Figure 27). One challenge of temporary demonstration projects is having to weigh the advantage of quick and low-cost interventions with concerns over how the materials look in a residential context.

Public Meeting and Final Draft

After analyzing the survey results, the project team developed draft recommendations for the project area. Those recommendations were presented to residents and town officials in a public meeting on March 19, 2025. Feedback from the meeting was incorporated into the final recommendations, which are found on the following pages.



Recommendations

The *Belleville Safer Streets Plan* includes recommendations for four streets that connect to Belleville High School: Division Avenue, Passaic Avenue, Joralemon Street, and Greylock Parkway. The plan envisions how to complete the streets by providing accommodation for non-motorists, such as those walking and biking, using e-scooters, riding skateboards, or using other forms of human-powered travel (Figure 28). Implementing the recommendations can help make walking or bicycling a comfortable and practical option for going to school, attending community events at the Municipal Stadium, and making short trips around town. The goal of the recommendations is to improve safety, accessibility, and comfort.

The recommendations on the following pages are listed by street, not in order of importance or difficulty of implementation. Prioritization is a question that Township officials and residents must address as they decide to move forward with implementation. Although bicycle and pedestrian infrastructure has a strong network effect in that residents become more comfortable walking and cycling when their entire route has safe infrastructure, it is not necessary for the entire plan to be implemented at the same time. Many of the improvements can be made gradually as funding allows, or can be added during the Township's standard roadway maintenance cycle.

The recommendations have been developed in line with the New Jersey Complete Streets Design Guide (developed by NJDOT) and the 11th edition of the Manual on Uniform Traffic Control Devices.



Figure 28. Students leaving Belleville High School.

Division Avenue

Division Avenue is a bidirectional residential roadway (Figure 29). Between Union Avenue and Mertz Avenue it is 36 feet wide, with parking on both sides. Between Mertz Avenue and Passaic Avenue, it is 30 feet wide with parking on one side. The speed limit is 25 mph, although no signage is posted. Near the school, the speed limit drops to 15 mph during school activity hours.

Safety concerns that were raised by municipal officials in their application and during project meetings include speeding, especially downhill, illegal parking, especially around school dismissal time, and limited visibility at some intersections (Figure 30). These concerns were confirmed during the site visit and then reiterated in the resident questionnaire. During the site visit, the project team noted that when traffic volumes were low, the roadway feels wide, which may encourage faster speeds (Figure 31). However, the sidewalks are narrow, and when a truck or bus passed, it felt uncomfortable (Figure 32). The narrow sidewalks also make it difficult for students to walk together (Figure 33).

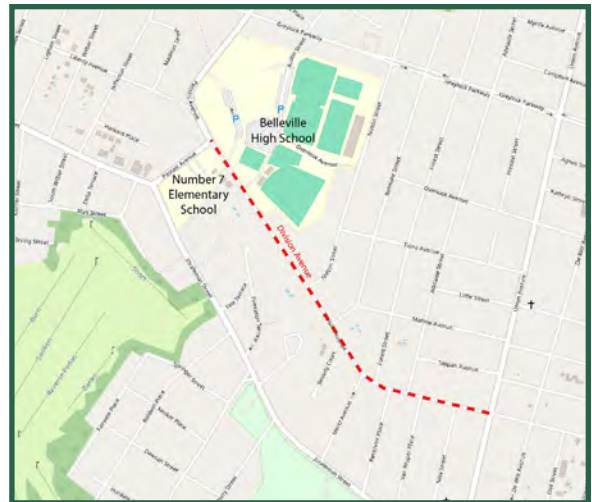


Figure 29. Division Avenue study area.



Figure 30. The "No Parking 8am-4pm School Days" sign was being ignored during the initial site visit.



Figure 31. Looking north on Division Ave., from Nolton St.



Figure 32. Large truck near the narrow sidewalk.



Figure 33. Pedestrians spilling onto the roadway due to a narrow sidewalk.

The narrow width of the roadway, combined with the demand for on-street parking, makes it difficult to add dedicated space for bicycles. As such, the project team recommends “bicycle boulevard” treatments.

The bicycle boulevard concept has many different names, including neighborhood greenways or quiet streets. According to the *New Jersey Complete Streets Design Guide*, bicycle boulevards are “linear corridors of interconnected, traffic-calmed streets where bicyclists are afforded an enhanced level of safety and comfort.” The benefits extend beyond bicyclists, as implementation increases safety and comfort for pedestrians and drivers as well. Adopting this approach can effectively encourage bicycling and walking by reducing vehicular speeds and discouraging cut-through traffic. Bicycle boulevards use pavement markings and traffic-calming measures to encourage slower driving while accommodating local access. Common treatments include slow speed limits and speed treatments, extra-large shared-lane markers, mini-roundabouts, and traffic diverters that allow bicyclists to continue straight, but force motorists to turn (Figures 34 –36).

A bicycle boulevard communicates that pedestrians and bicyclists have priority along the corridor and that motorists must safely share the road. Because Division Avenue is a residential roadway, it is a natural corridor for pedestrians and bicyclists making short trips. The bicycle boulevard approach would fit the character of the residential neighborhood.

Bicycle boulevards are an unfamiliar concept to most New Jersey residents. As such, it is important to communicate the purpose of the project to residents and visitors. On the corridor itself, there are two types of signage that would need to be deployed: regulatory and informational. Regulatory markings would include speed limit signs, marked crosswalks, and instructions to drivers, bicyclists, and pedestrians where appropriate. This can include the “Bicycles May Use Full Lane” (R4-11) signs. Informational signage could include branding, wayfinding, and explanations of the project's purpose. It is important that community input informs the branding for these corridors (Figures 37 –38).

Pavement markings reinforce the message of the corresponding signage. Shared-lane pavement markings can show bicyclists where to position themselves and remind drivers that bicyclists may use the center of the lane. Lowering the speed limit to 15 or 20 mph is key to a successful bicycle boulevard. Reducing speeds helps prevent collisions, making bicyclists and pedestrians feel more comfortable when sharing the road with motor vehicle traffic.



Figure 34. Pavement markings for a bicycle boulevard in Ocean City, New Jersey.



Figure 35. Extra large bicycle boulevard stencils.



Figure 36. Permanent mini-roundabout in Seattle, WA.



Figure 37. Bicycle Boulevard signage in McKinley, Texas.

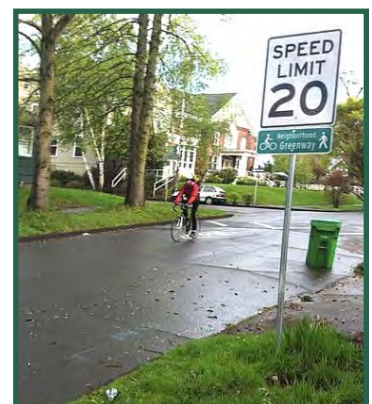


Figure 38. Signs for a bicycle boulevard in Portland, OR.

Signage is not enough to ensure that drivers follow the lower posted speed limit. Additional tools exist to help reduce vehicle speeds so that they are closer to the speed of a bicycle. Traffic calming measures can include vertical deflection (e.g., speed humps or tables at intersections) or horizontal deflection (e.g., chicanes and mini-roundabouts) (Figures 39 and 40). Green infrastructure refers to projects that reduce flooding, add greenery, and address health concerns through the addition of vegetation. A curb extension can serve as a rain garden to collect stormwater and add native plants (Figure 41).



Figure 39. A permanent chicane example located at 3113 Brentwood Road, Raleigh, North Carolina.



Figure 40. An example of a raised crosswalk.



Figure 41. A curb extension with rain garden, in Newark, NJ.

Figure 42 shows potential improvements in the section between Union Avenue and Reservoir Place.

- New 20 mph speed limit sign and roadway stencil.
- Bicycle shared lane striping and signage.
- Marked high-visibility crosswalks across Division Avenue, where curb ramps already exist.
- Painted curb extensions around crosswalks to prevent illegal parking.



Figure 42. Recommended changes to striping and signage on the east end Division Avenue.

Curb extensions enhance visibility between all roadway users, decrease the crossing distance for pedestrians, physically prevent illegal parking, and allow for the addition of green infrastructure. In the short term, a curb extension can be created with paint and flexible vertical elements (Figure 43). Care should be taken to ensure the aesthetics of the extensions match the neighborhood character. Planters or granite blocks can be considered as an alternative to plastic flex posts. In the long term, making the extensions permanent by relocating the curbs would allow for expanded greenery and would best complement the adjoining properties. Any relocation of the curb would need to consider stormwater drainage and utility access.



Figure 43. Curb extensions created with paint.

Figure 44 shows the intersection of Division Avenue and Mertz Avenue, and how much space can be reclaimed for other uses by constructing curb extensions. In addition to the curb extensions, a raised crosswalk at this intersection could help enforce the residential speed limit. As with the previous section, the bicycle shared lane markings and speed limit signage should continue.



Figure 44. Recommended changes on Division Ave. by Mertz Ave.

West of Mertz Avenue, the roadway crests at Belmoor Street (Figure 46). Approaching the High School, Division Avenue slopes down, which can result in faster driving speeds. A speed bump on this section may cause issues due to the slope. Instead, a small curb extension could be added in front of the pocket park (across from 320 Division Avenue) to visually narrow the roadway during times when there are no parked cars (Figures 45 and 47).



Figure 45. Looking to Division from the pocket park.



Figure 46. Looking south on Division Avenue where the roadway crests.



Figure 47. Curb extension in front of pocket park.

Along the school property, parking is prohibited, although a line of vehicles was observed to be stopped in the no parking zone (Figure 30). While it is possible to add a bicycle lane here, it would be too short to provide much benefit. In addition, it would conflict with the current practice of parents dropping off and picking up students at the curb—a significant change in school arrival and dismissal behavior would be needed to avoid vehicles from blocking a bike lane at these key times. However, there is already a wide sidewalk inside the school property that leads to the main entrance that ends abruptly at a narrow sidewalk (Figure 48). Extending this path to the next driveway would provide more walking space for students going to school.

The two driveways into the school are wider than needed, which can encourage faster turning speeds. The bidirectional driveway into the parking lot by the tennis courts (also known as Austin Street) is 40-feet wide (Figure 49). The second driveway is 42-feet wide, even though it is one-way (Figure 51). Decreasing the width of the entrances still allows buses to pull in as needed, but makes all drivers take the turn slower (Figure 50).



Figure 48. The wide sidewalk from the school ends abruptly as it meets Division Avenue.



Figure 49. Austin Street/driveway entrance is wider than needed for vehicles, encouraging higher speeds.



Figure 50. The extremely wide turning radius into school driveway is larger than needed for school buses.



Figure 51. Recommended changes include extending the wide sidewalk and adding curb extensions at the driveways.

Passaic Avenue

Passaic Avenue, between Greylock Parkway and Division Avenue, has the same characteristics and constraints as Division Avenue (Figure 52). It is 30 feet wide, has a 25 mph speed limit, there is demand for residential and school parking, and the roadway is sloped.

As such, the study team recommends continuing the bicycle boulevard treatments. Figure 53 shows potential improvements in the section between Greylock Parkway and Division Avenue.

- New 20 mph speed limit sign and roadway stencil.
- Bicycle shared lane striping and signage.
- New marked high-visibility crosswalk between Belleville High School and the Lenape Trail/utility corridor.

The Lenape Trail is a 36-mile trail connecting 18 parks and 11 municipalities in Essex County⁴. In the study area, the trail route follows parts of Joralemon Street and Passaic Avenue. Across from the High School driveway entrance on Passaic Avenue, it continues as an unpaved trail along a utility corridor (Figure 54). If the utility corridor trail were to be formalized with a paved or gravel path, it would provide a convenient off-road connection to various residential blocks. However, even if the Lenape Trail corridor is not used for transportation purposes, the spacing between homes provides a natural location to build a speed bump or raised crosswalk with curb extensions to help manage speeds.

4. <https://www.nynjtc.org/ldt-lenape-trail/>

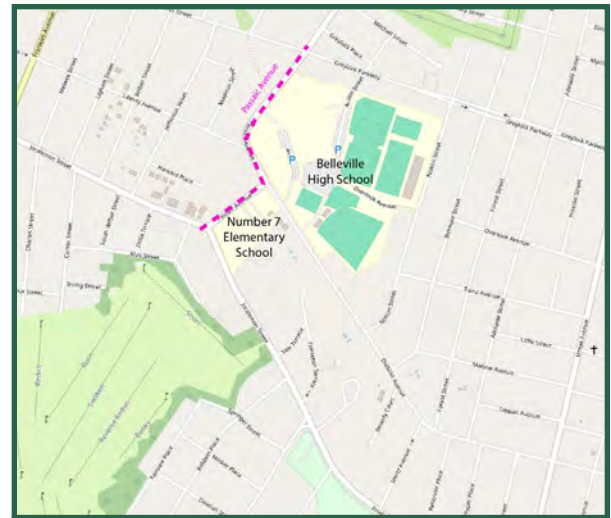


Figure 52. Passaic Avenue study area.

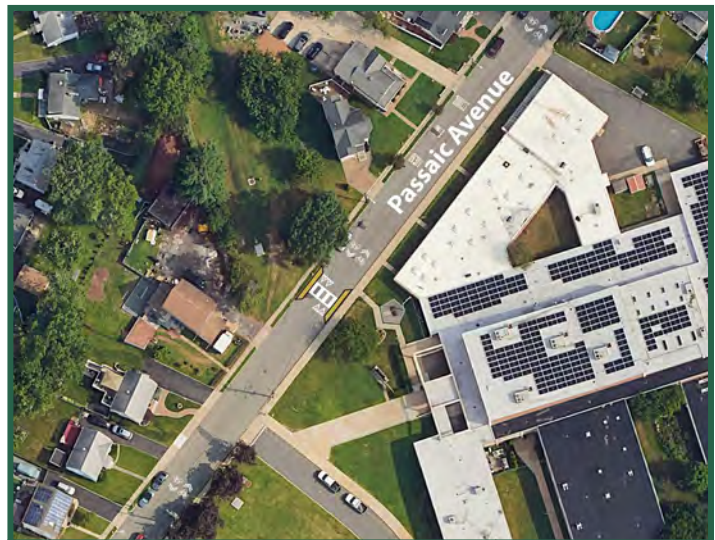


Figure 53. Potential improvements for Passaic Avenue.



Figure 54. Belleville High School viewed from the Lenape Trail.

Continuing south, Passaic Avenue intersects with Liberty Avenue and Division Avenue. As shown in Figure 55, curb extensions can be added to slow vehicles and increase the number of drivers yielding to crossing pedestrians. High-visibility marked crosswalks can be added to enhance visibility.

Passaic Avenue ends at Joralemon Street, which is a signalized intersection (Figure 59). The traffic signal at this intersection is old and would benefit from being upgraded. Recommended improvements at this intersection include:

- Pedestrian signal heads with Accessible Pedestrian Signals (APS) that provide auditory, visual, and vibrotactile information to pedestrians.
- ADA-compliant curb ramps.
- 12-inch signal heads with retroreflective backplates.
- Additional overhead lighting.
- Consider an all-pedestrian phase during school dismissal.



Figure 55. Potential improvements for Passaic Avenue.



Figure 56. Looking south on Passaic Avenue, across from the High School. Heavy congestion at dismissal time.



Figure 57. Looking south on Passaic Avenue at Division Avenue, the Elementary School on the left.



Figure 58. Looking north on Passaic Avenue toward the High School.



Figure 59. Looking south at the intersection with Joralemon Street.

Joralemon Street

Joralemon Street is predominantly 36 feet wide, widening to 40 feet in front of Elementary School #7 (Figure 60). Because it has greater traffic volumes and higher average speeds than the previous two roadways, a shared bicycle lane is not recommended (See Table 1). Removing parking on one side of the roadway could allow for a bicycle lane (in one direction) or a narrow two-way bike path (Figure 61). However, doing this would be challenging as there are many driveways throughout the corridor. Additionally, the team observed a variety of larger vehicles (buses and trucks) that further complicate the addition of bicycle infrastructure.

Instead, Belleville should focus on building curb extensions throughout the corridor to increase pedestrian safety and enhance visibility for all users. Between Passaic Avenue and Union Avenue, there is only one crosswalk across Joralemon Street—a newly added installation with Rectangular Rapid Flashing Beacons (RRFB) at Garden Avenue. This new crosswalk improves access to the Recreation Center. Additionally, Garden Avenue provides a connection to Branch Brook Park and the future “Greenway.”

The intersection with New Street, in particular, presents an opportunity to reclaim a generous amount of space by building curb extensions (Figure 62). Joralemon Street widens to 55 feet at that intersection, but only 22 feet are needed for the two travel lanes. Although a signalized intersection with Union Avenue is less than 250 feet to the east, that intersection is heavily skewed, creating long and awkward crosswalks. Pedestrians may feel more comfortable crossing at an unsignalized but shorter intersection.

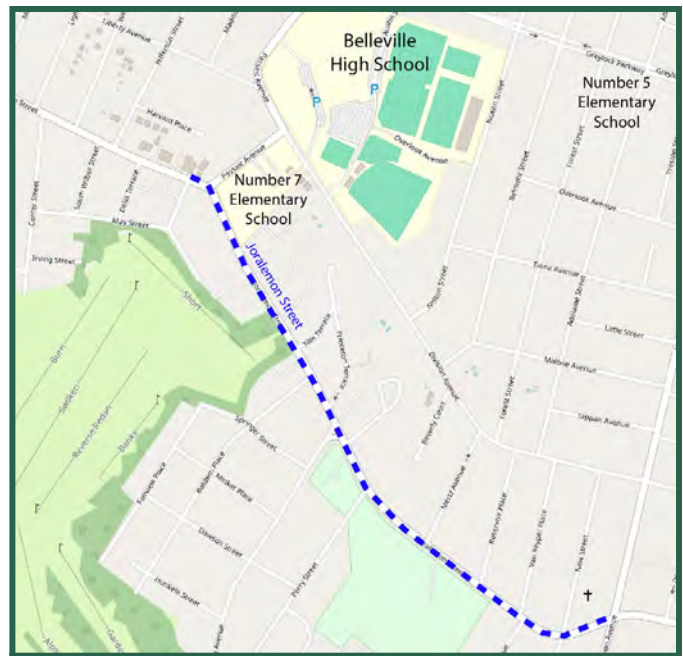


Figure 60. Joralemon Street study area.



Figure 61. A hypothetical bicycle lane would require removing parking on one side of the roadway.



Figure 62. Potential improvements for Joralemon St. and New St.

The project team observed heavy congestion and potentially dangerous behavior in front of Elementary School #7 at dismissal time. Parents were observed double and triple parking, which blocked school buses (Figure 63). Drivers were observed crossing the double yellow line to go around the standing cars (Figure 64). Parents with children were seen crossing the street between cars (Figure 65).

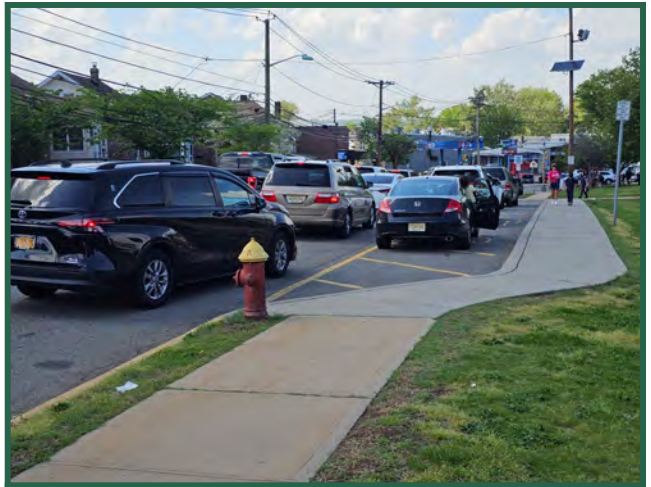


Figure 63. A double line of illegally stopped cars blocking the school bus pullout.



Figure 64. NJ Transit bus crossing into oncoming lane to pass illegally stopped cars.

Next to the elementary school, the sidewalk in front of 498 Joralemon Street lacks curb ramps and is narrow. Curb ramps should be added, and the sidewalk should be widened to at least five feet wide to meet Public Right-of-Way Accessibility Guidelines (PROWAG) standards⁵. A wider sidewalk also creates an environment where parents can comfortably walk next to their children (Figures 66–68).



Figure 65. Children dashing across the street away from the intersection.



Figure 66. Missing curb ramp.



Figure 67. Additional missing curb ramps.

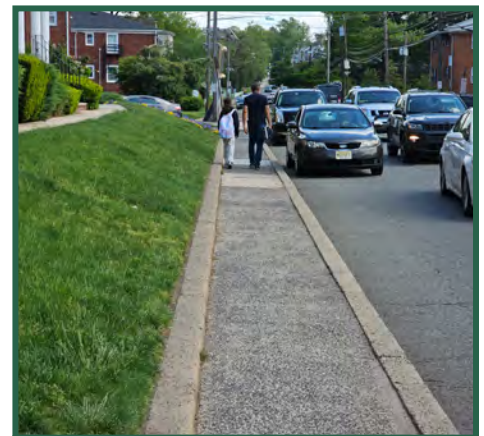


Figure 68. Narrow sidewalk.

Currently, the westbound traffic lane is 16 feet wide, but parking is not allowed. As such, there are up to five feet available for sidewalk expansion. Sidewalk improvements may encourage more parents to walk instead of driving, decreasing some of the congestion. However, increased enforcement related to double parking and blocking the bus pickup should be considered as well.

5. R302.2 Continuous Clear Width, <https://www.access-board.gov/prowag/technical.html#r3022-continuous-clear-width>

Greylock Parkway

The design of Greylock Parkway changes three times within the study area (Figure 69). Between Passaic Avenue and Nolton Street, it is 40 feet wide, with bidirectional traffic and street parking (Figure 70). Between Nolton Street and Forest Street, an 8-foot-wide grassy center median narrows the driving area (Figure 71). East of Forest Street, continuing to Washington Avenue, there is a smaller four-foot-wide concrete median. This results in a 14-foot travel lane in each direction, with street parking. The topography creates a crest at Forest Street, which reduces visibility in both directions. To address this concern, Belleville has installed pedestrian-activated RRFBs at this intersection (Figure 72).



Figure 69. Greylock Parkway study area.

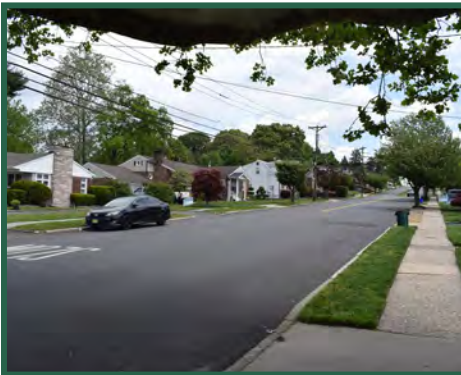


Figure 70. Greylock Parkway between Passaic Avenue and Nolton Street.



Figure 71. Greylock Parkway between Nolton Street and Forest Street.



Figure 72. Looking east on Greylock Parkway where it crests at Forest Street.

The changes in width make it difficult to add dedicated bicycle infrastructure along this corridor. However, as with the previous sections, it is feasible to enhance overall safety by constructing curb extensions at intersections. The curb extensions should enhance visibility and help slow drivers.

A construction project also presents the opportunity to add streetscaping elements to the project area. Adding trees or other plantings to the grass median can both enhance the visible appeal of the corridor and provide a vertical reference for drivers, which can help reduce speeds. Planters and banners added to the concrete median can help do the same. Pavement treatments, like a textured intersection or a raised intersection, can also be effective in reducing speeds (Figure 73).



Figure 73. Raised intersection in Cambridge, MA.

Concurrently with the Complete Streets Technical Assistance project, as part of a proposed application for a Transportation Alternatives Set-Aside federal grant, Belleville worked with an engineering firm to create draft drawings in line with these recommendations (Figure 74). The CSTA team also recommends adding a median to Greylock Parkway west of Nolton Street to create a uniform cross-section. Additionally, shared lane markings and signage can be added to Greylock Parkway.

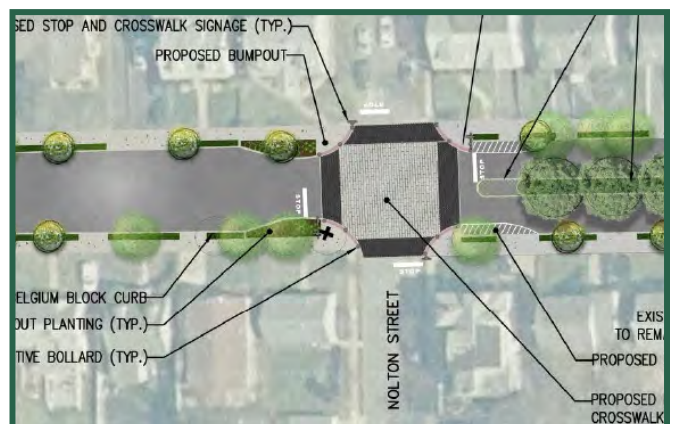


Figure 74. Draft drawings for Greylock Parkway.

Additional Recommendations

I. Provide and Maintain High-Quality Pedestrian Infrastructure

The neighborhood surrounding Belleville High School is well suited for walking. Sidewalk conditions are generally good, but some segments have maintenance issues, such as uneven pavement, cracks, or objects obstructing the pedestrian path, such as parked vehicles (Figures 75–77). Some of these issues create a tripping hazard for pedestrians and negatively impact accessibility, particularly for older adults and people with disabilities. The lack of bicycle infrastructure (lanes or paths) may encourage bicyclists to choose to ride on the sidewalk, and some were seen doing so during the observations. In most cases, sidewalk width is four feet, which is typical for a residential area. Although this meets minimum accessibility standards, it is not wide enough for two pedestrians to comfortably walk together side by side. so the Township should seek opportunities to widen sidewalks, where feasible, in areas with many pedestrians.



Figure 75. Broken sidewalk on Greylock.



Figure 76. Sloped sidewalk at driveway.



Figure 77. Missing curb ramps on Joralemon Street.

2. Add and Maintain Street Trees

Street trees improve pedestrian comfort by providing shade and creating a buffer between moving vehicles and the sidewalk. In addition, they provide aesthetic and air quality benefits and help to absorb stormwater. The Township, working through the Shade Tree Commission and in partnership with property owners, should proactively seek to maintain existing street trees, add new street trees where there are lengthy gaps, and replace street trees that are removed due to disease or storm damage (Figure 78). Additionally, reducing impervious surfaces and adding green infrastructure, such as the use of stormwater tree pits or rain gardens, can help mitigate localized flooding.



Figure 78. No shade for pedestrians.

3. Lighting

A lighting study was not conducted as part of this project, and the study area was not visited at night. However, the project team did notice that streetlights are placed far apart, and many intersections lack well-positioned overhead lights. Crashes occurring at night are significantly more likely to result in fatalities than those in daylight conditions. Lighting increases the visibility of all roadway users and is a way to systematically improve safety. As such, lighting is an FHWA Proven Safety Countermeasure⁶. In addition, lighting of pedestrian spaces can encourage nighttime use by alleviating personal safety concerns. Belleville should ensure that both the roadway and sidewalks are well-lit, especially at intersections. Pedestrian-scale lighting along the sidewalks can help with personal safety concerns. As the study area is a residential area, Belleville should select lighting designs that minimize glare and ensure that lighting is focused on the roadway and not on residential properties.

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

Conclusion

Belleville High School and the Municipal Stadium are centrally located in an attractive residential neighborhood. Local officials interested in making it safer and easier to bike to these destinations applied to the CSTA Program to audit current conditions and develop recommendations for potential improvements. The project also included a temporary demonstration component, allowing the Township to trial a two-way protected bicycle lane.

This report identifies several recommendations that could improve pedestrian and bicycle access to destinations and discourage unsafe driving behaviors using a range of designs consistent with the New Jersey Complete Streets Design Guide. High-visibility crosswalks, curb extensions, green infrastructure, lighting, and modifications to striping could improve the walkability and bikeability of the area while encouraging more people to walk and bike for transportation. Thanks to extensive feedback provided by residents through an online questionnaire, Belleville is now better equipped to move forward with improvements that enhance safety.

Some of the recommendations can be implemented during periodic maintenance, such as upgrading crosswalk striping and adding enhanced bicycle striping during routine roadway resurfacing. More intensive and costly roadway changes, such as curb extensions, stormwater tree pits, and green infrastructure, may be best suited for competitive funding grants. A list of funding sources that can be used by municipalities to implement pedestrian and bicycle improvements is included as Appendix C.

While the recommendations in this plan were limited to four major corridors around the high school, Belleville should identify parallel roadways that can receive similar treatments to improve safety throughout the entire Township.



Figure 79. High school students with Township and school district officials at the conclusion of a bike ride to school.



Appendix

A. Online Questionnaire

B. Temporary Demonstration Designs

C. Public Meeting Flyer

D. Potential Funding Resources

E. Design Resources

A. Online Questionnaire

2024 Belleville Temp Demo Survey

Start of Block: Default Question Block

Q0 Belleville Division Avenue Bicycle Lane Demonstration - Questionnaire

Q1

This questionnaire is intended to get local input on the bicycle path installed on Division Avenue between Nolton Street and Belleville High School. This temporary demonstration will be in place from October 24 to November 1. Once the demonstration concludes, the road will be returned to the way it was before.

The purpose of the demonstration is so students and residents can see and try a protected bicycle path, which is one type of infrastructure that could be recommended in a Bicycle Network Plan being developed for the high school neighborhood through the Complete Streets Technical Assistance program (a partnership of Voorhees Transportation Center at Rutgers, Sustainable Jersey, and the North Jersey Transportation Planning Authority). The goal of the plan is to improve roadway safety around the school and to encourage students and residents to walk and bicycle to the school, instead of driving. Shifting school trips away from motor vehicles can help reduce neighborhood congestion and increase quality of life for residents. To learn more about the program, visit <https://www.njtpa.org/completestreets>. Your participation in this questionnaire is voluntary. By completing this survey, you will be contributing to knowledge surrounding the use, community perspective, and safety of pedestrian and bicyclist infrastructure in Belleville, NJ. If you choose to take part now, you may exit the survey at any point. In addition, you can choose to skip questions that you do not wish to answer. If you do not click on the 'submit' button after completing the form, your responses will not be recorded. If you do not wish to take part in the research, close this webpage. If you have questions about this questionnaire, you can contact bikeped@ejb.rutgers.edu.

I acknowledge that I have read and understand the information. I agree to take part in the research, with the knowledge that I am free to withdraw my participation without penalty.

Click on the "Start Survey" button to confirm your agreement to participate in the questionnaire.

End of Block: Default Question Block

Start of Block: Block 1

Q2 Are you a... (select all that apply)

- ☐ Student in a Belleville Public School (1)
 - ☐ Parent / Guardian of a student in Belleville Public Schools (2)
 - ☐ Staff Member / Administrator / School Board Member in Belleville Public Schools (5)
 - ☐ Belleville resident, living on Division Avenue (6)
 - ☐ Belleville resident, **NOT** living along Division Avenue (7)
 - ☐ Municipal Employee / Police Officer / Councilperson in Belleville (8)
 - ☐ Work / own a business in Belleville (9)
 - ☐ Visitor (10)
 - ☐ Other (11) _____
-

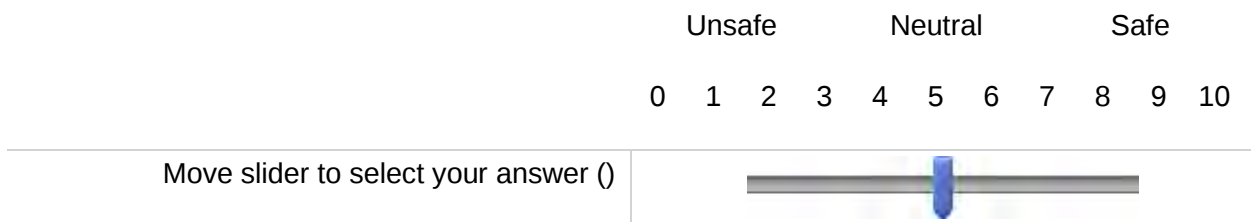
Q3 How often do you visit Division Avenue by Belleville High School?

- ☐ Daily (1)
 - ☐ Frequently (several times per week) (2)
 - ☐ Infrequently (less than once a week) (4)
 - ☐ First time (5)
-

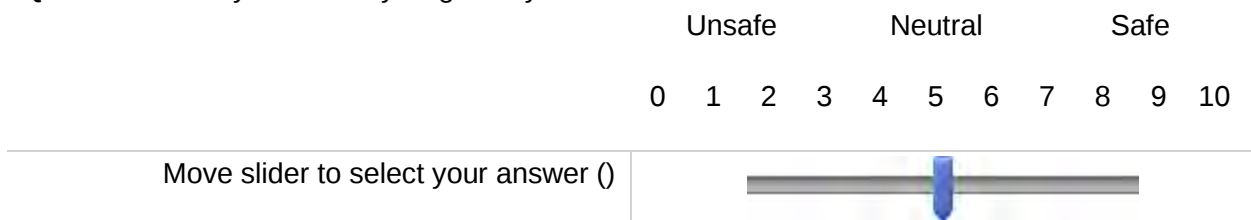
Q4 How do you usually travel along Division Avenue by Belleville High School? (**select all that apply**)

- ☐ Walking (including with a mobility device like a walker or wheelchair) (1)
- ☐ Bicycling / Scootering (2)
- ☐ Driving (3)
- ☐ Passenger in a car or bus (4)

Q5 How would you rate walking (pedestrian) safety of Division Avenue **before** the demonstration:



Q45 How would you rate bicycling safety of Division Avenue **before** the demonstration:



Q47 The temporary demonstration removed parking to trial a two-way protected bicycle path between Nolton Street and Belleville High School. Striping at crosswalks was also modified to improve the visibility of pedestrians. Protected bicycle paths provide a dedicated space for bicyclists to ride, away from motor vehicles and off sidewalks. Separating bicyclists and motor vehicles reduces conflicts that can arise due to the differences in their travel speeds. Bicycle paths have also been found to reduce motor vehicle speeds, increasing safety for all users.

Pedestrians may also feel more comfortable with motor vehicle traffic placed further away from the sidewalk.

Q7 Compared to how Division Avenue was before the demonstration, do you think the temporary bicycle path made the roadway:

	More safe (1)	No change (2)	Less safe (3)	Did not experience before change (4)
For pedestrians (1)	0	0	0	0
For bicyclists (2)	0	0	0	0
For drivers (3)	0	0	0	0

Q8 Use this space if you would like to tell us how you feel the temporary bicycle path has, or has not, impacted safety:

Q9 Compared to how Division Avenue was before the demonstration, do you think the temporary bicycle path makes it:

- ☐ More attractive/welcoming (1)
 - ☐ No change (2)
 - ☐ Less attractive/welcoming (3)
 - ☐ Did not experience before (4)
-

Q10 Use this space if you would like to tell us how you feel the temporary bicycle path has, or has not, impacted the attractiveness or welcoming feeling of the area:

Q11 Would you support the installation of a permanent bicycle path along Division Avenue?

- ☐ Yes (1)
 - ☐ No (2)
-

Q12 Use this space if you would like to tell us why:

Q13 Do you think a protected bicycle path would work on another roadway in Belleville?

☐ Yes (1)

☐ No (2)

Q14 If yes, do you have a specific location in mind?

Q25 Do you have any ideas on improving roadway safety around Belleville High School that you would like to share?

End of Block: Block 1

Start of Block: Block 5

Q16 What year were you born?

Enter year (1) _____

Q17 With which race do you **most** identify with? (Select one)

- ☐ Black or African American (1)
 - ☐ White (2)
 - ☐ American Indian or Alaska Native (3)
 - ☐ Asian (4)
 - ☐ Native Hawaiian or Pacific Islander (5)
 - ☐ Not listed (6)
 - ☐ Two or more races (7)
 - ☐ Prefer not to answer (8)
-

Q18 Are you Hispanic or Latino?

- ☐ Yes (1)
 - ☐ No (2)
 - ☐ Prefer not to answer (3)
-

Q19 Which most closely describes your gender?

- ☐ Male (1)
 - ☐ Female (2)
 - ☐ Non-binary / Non-conforming (3)
 - ☐ Not listed (4)
 - ☐ Prefer not to answer (5)
-

Q15 Any other comments or input you would like to share?

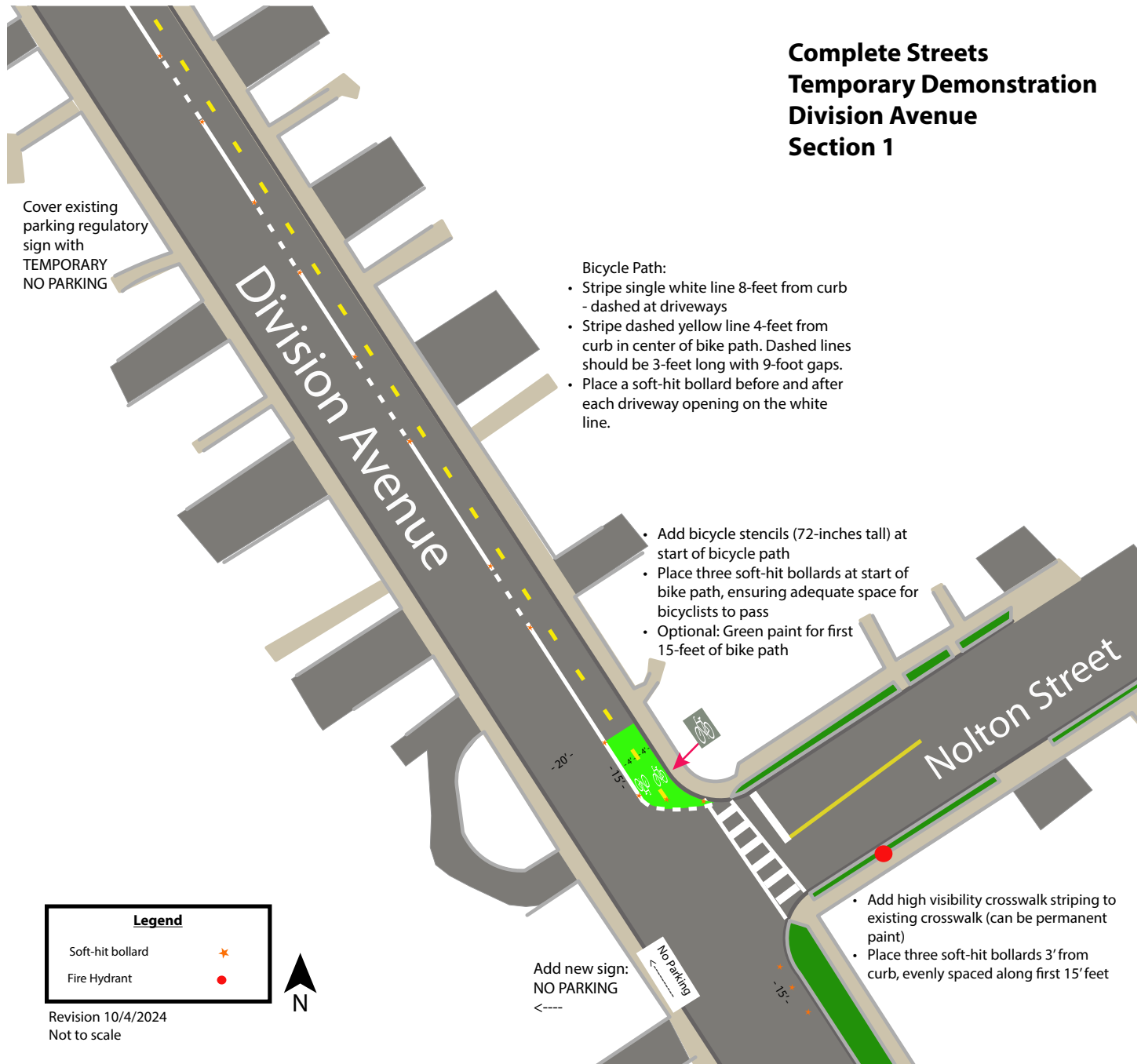
Q48 During Spring 2025, the project team will present recommendations on creating a safe bicycle network around Belleville High School. If you are interested in receiving updates about the project, including details on a public meeting, please provide your contact info here. Information will also be shared through Belleville's communication channels if you do not wish to share your contact information with us today.

☐ Names (1) _____

☐ Email (2) _____

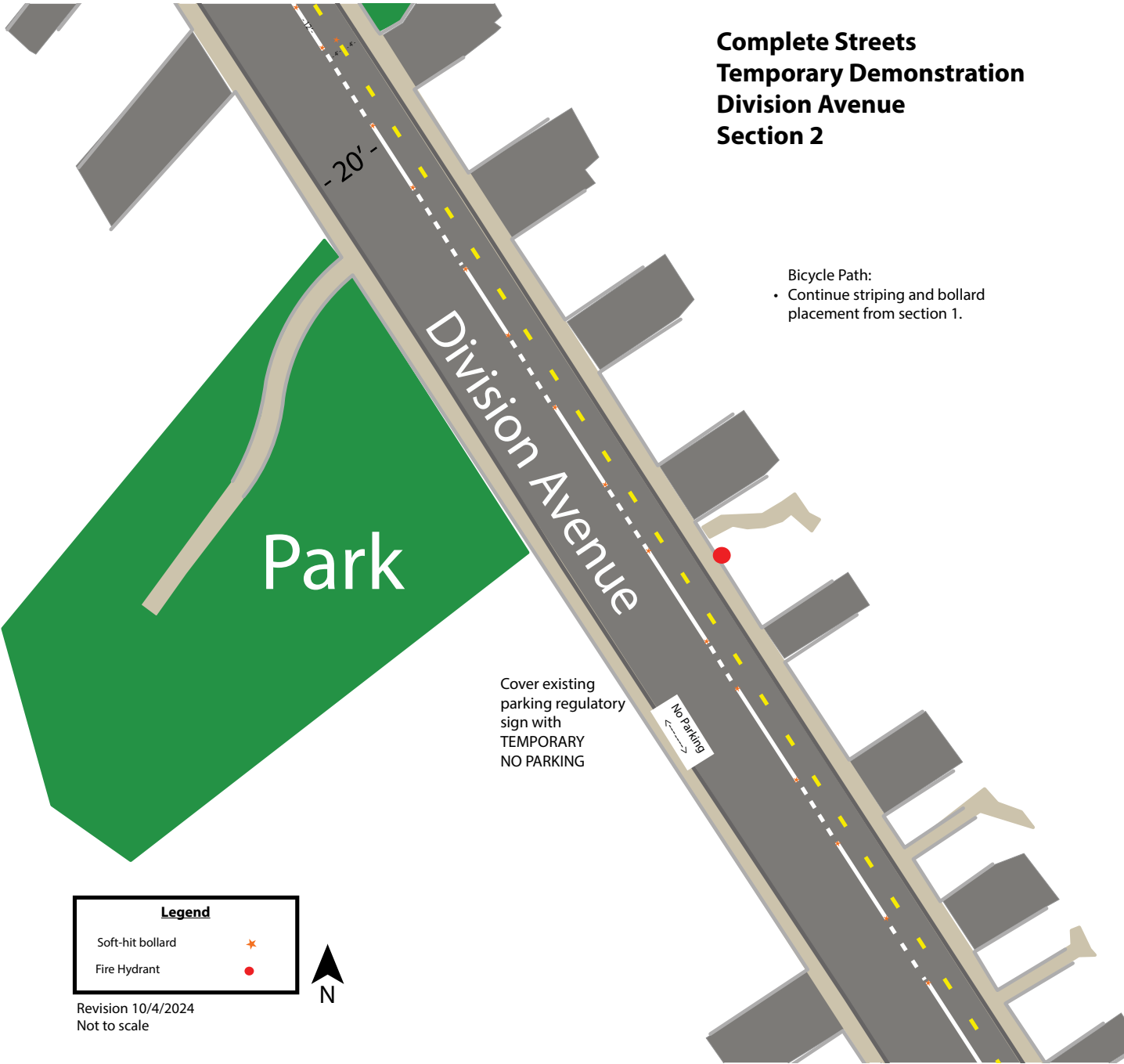
End of Block: Block 5

B. Temporary Demonstration Designs

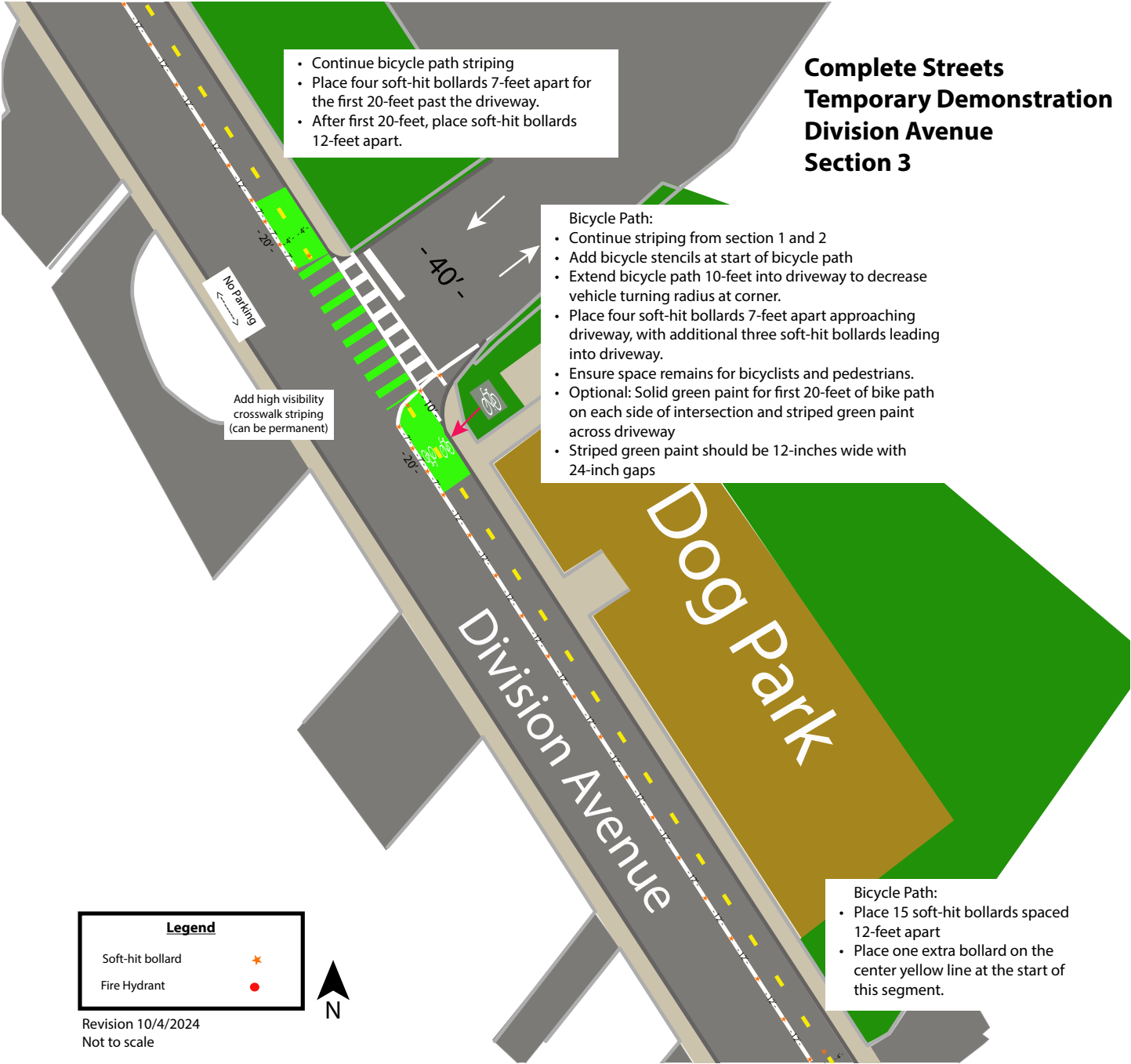


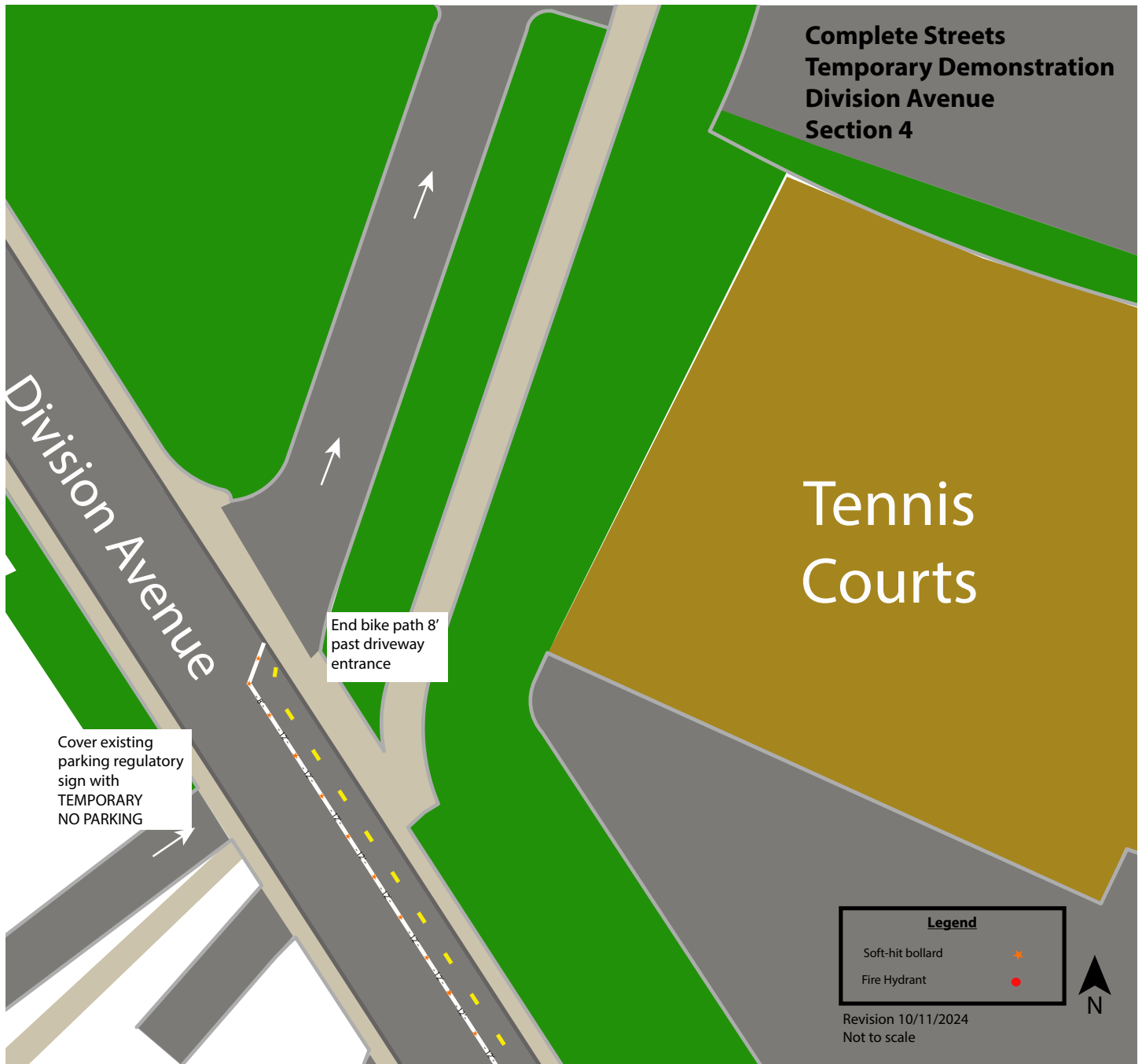
**Complete Streets
Temporary Demonstration
Division Avenue
Section 2**

- Bicycle Path:
- Continue striping and bollard placement from section 1.



Complete Streets Temporary Demonstration Division Avenue Section 3





Belleville Temporary Materials List:

Soft-hit bollards with rubber base	72 units
White paint to mark bicycle path	950 feet
Yellow paint for bicycle path center line	230 feet
Green paint at end of bicycle path	600 – 900 sq-ft
Bicycle stencil	1
Spray chalk – white (for bicycle stencil)	

Materials:

Belleville can request materials from the NJTPA Complete Streets Demonstration Library. The request should be made as soon as possible to increase the chances of availability of materials.

Soft-hit bollards with a rubber base are recommended due to the short-term nature of the demonstration.

Speed study:

- While the demonstration project is in place, place police speed trailer as close to 355 Division Street as possible (where speeds were measured in May) – likely between Passaic Avenue and the Elementary School exit driveway – measuring traffic heading northwest.
- Trailer should be on stealth mode – do not provide speed feedback to motorists or other indications that will cause drivers to slow down for the study.
- Placement should be continuous for minimum 48 hours (72 preferred) on weekday during normal school operations. Tuesday-Thursday preferred.

Belleville High School Safer Streets Plan Virtual Public Meeting

Wednesday, March 19, 2025, 6:30 pm to 7:45 pm

Online meeting: <http://go.rutgers.edu/Belleville>



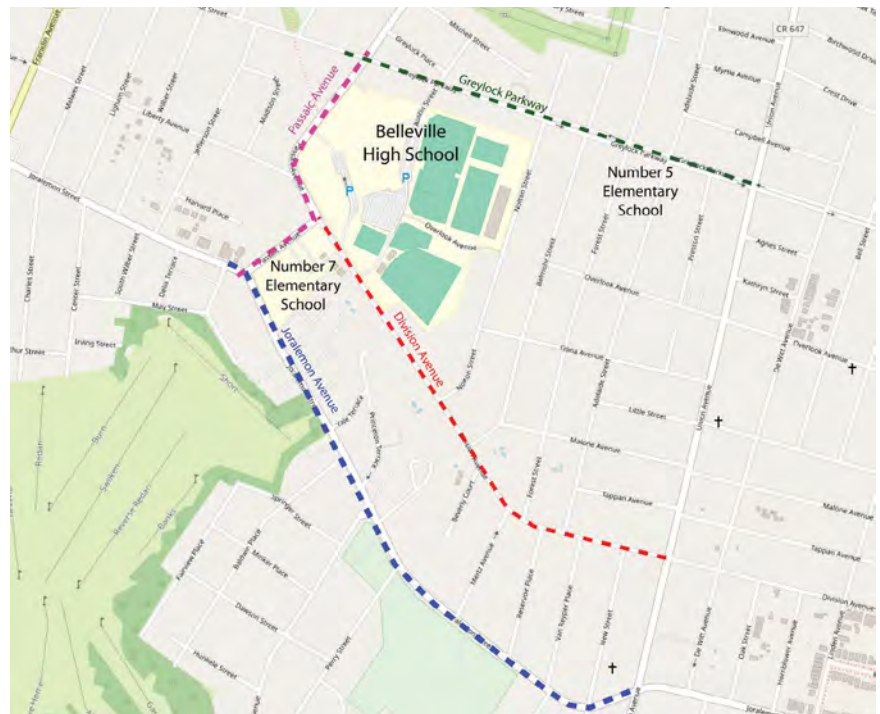
Learn about recommendations to make walking and bicycling to Belleville High School safer and more comfortable for all!

Join us on Wednesday, March 19, to learn more about possible pedestrian and bicycle safety improvements around Belleville High School.

The recommendations are based on a study of four streets around the school and address the public feedback received during a temporary bike lane demonstration installed on Division Avenue last fall.



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 supports municipal efforts to make a safer, more connected road network for all users.



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Belleville High School

Plan para calles más seguras

Reunión pública virtual

Miércoles, marzo 19, 2025, 6:30 pm to 7:45 pm

Reunión virtual: <http://go.rutgers.edu/Belleville>



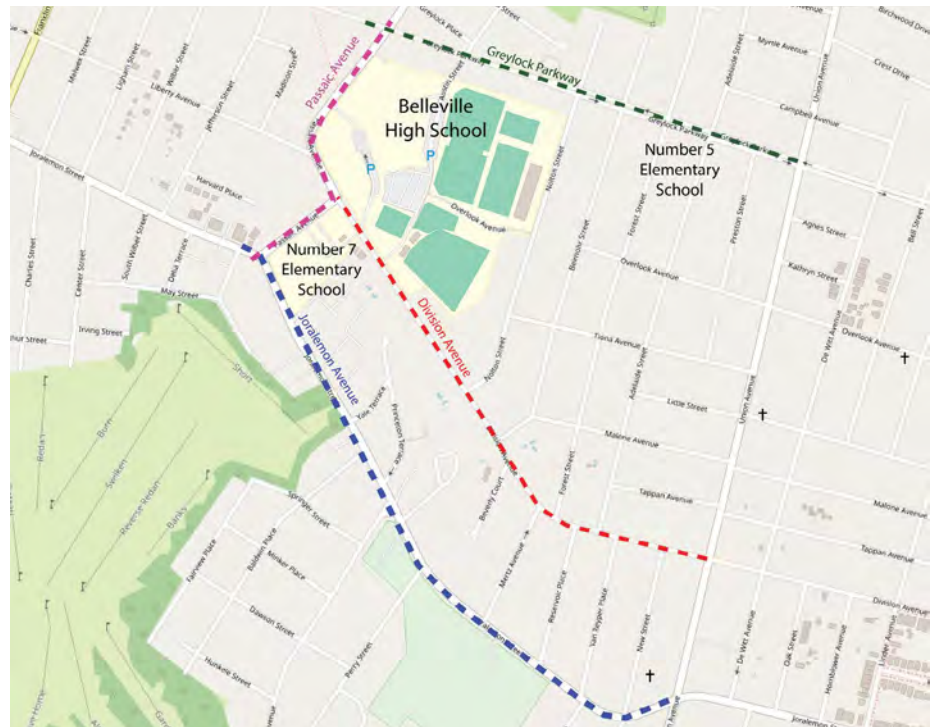
¡Conozca las recomendaciones para hacer que caminar y andar en bicicleta hasta Belleville High School sea más seguro y cómodo para todos!

Únase a nosotros el miércoles 19 de marzo para obtener más información sobre las posibles mejoras de seguridad para peatones y ciclistas en las calles alrededor de Belleville High School.

Las recomendaciones se basan en un estudio de cuatro calles alrededor de la escuela y abordan los comentarios del público recibidos durante una exposición temporal de un carril para bicicletas instalado en Division Avenue el otoño pasado.



Este esfuerzo forma parte del Programa de Asistencia Técnica de Calles Completas, una colaboración entre Sustainable Jersey, el Centro de Transporte Voorhees de la Universidad Rutgers y la Autoridad de Planificación del Transporte del Norte de Jersey (NJTPA). Financiado por la NJTPA, el programa apoya los esfuerzos municipales para crear una red vial más segura y conectada para todos los usuarios.



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D. 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.

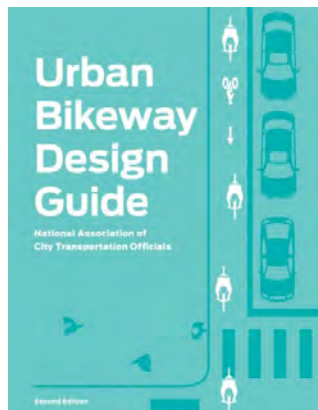
County and Municipal Open Space Trust Funds: All New Jersey counties and many New Jersey municipalities have an Open Space Trust Fund, which is a dedicated program supporting open space land acquisition. The trust funds are established by ballot measure. Depending on the fund parameters, other development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

E. Design Resources

NACTO Guides



[Urban Street Design Guide](#)



[Urban Bikeway Design Guide](#)



[Transit Street Design Guide](#)



[Urban Street Stormwater Guide](#)



[Global Street Design Guide](#)



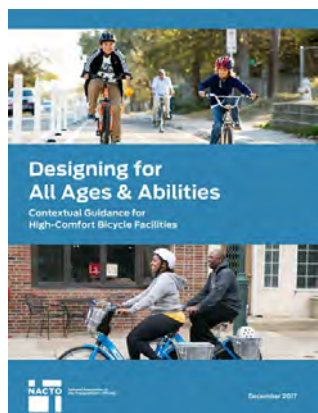
[Designing Streets for Kids](#)



[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](#)



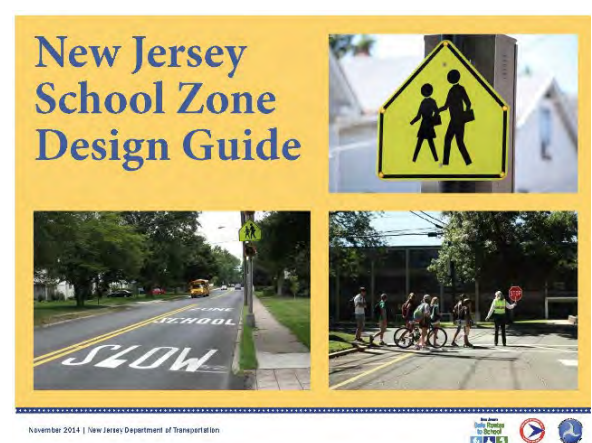
[A Guide to Creating a Complete Streets Implementation Plan](#)



[A Guide to Policy Development](#)



[School Bicycle Parking Guide](#)



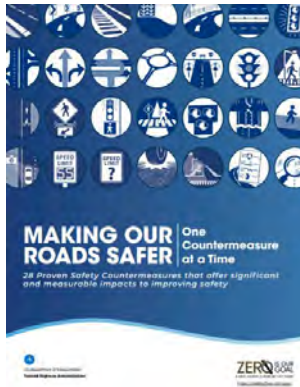
[New Jersey School Zone Design Guide](#)

ADA Guidelines



[ADA Standards for Accessible Design](#)

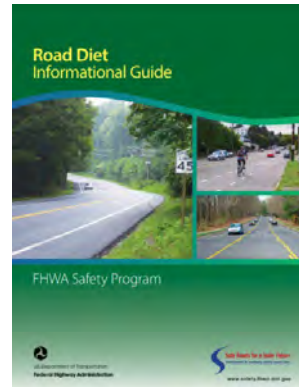
FHWA Guides



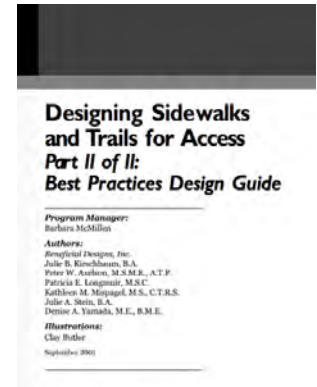
[Making Our Roads Safer: One Countermeasure at a Time](#)



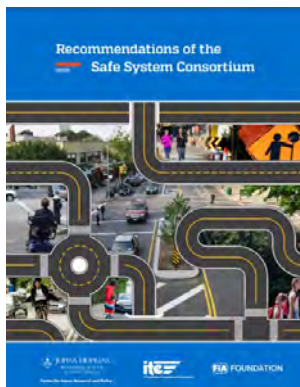
[Separated Bike Lane Planning and Design Guide](#)



[Road Diet Informational Guide](#)



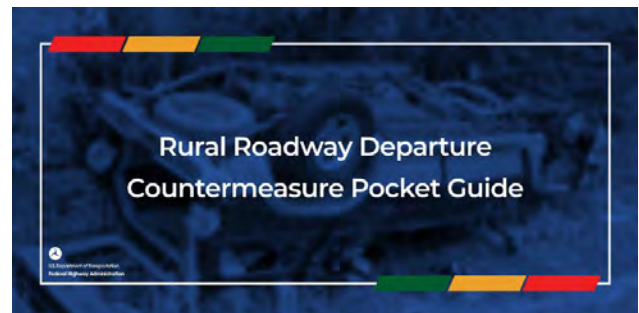
[Designing Sidewalks and Trails for Access Part II of II: Best Practices Design Guide](#)



[Recommendations of the Safe System Consortium](#)



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

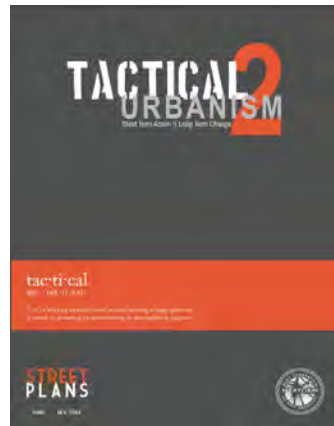


[Rural Roadway Departure Countermeasure Pocket Guide](#)

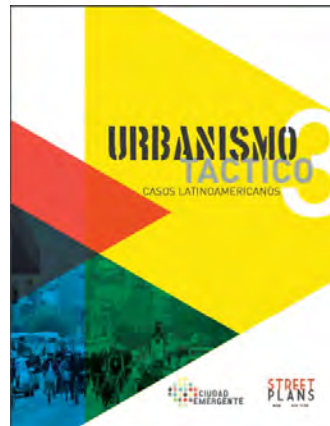
Tactical Urbanism Guides



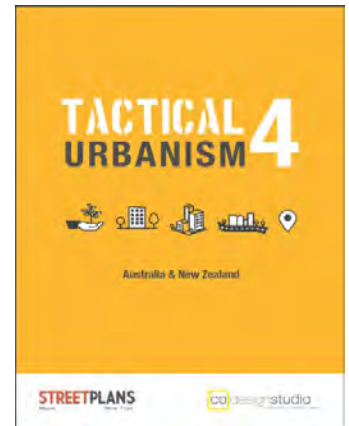
[Tactical Urbanism 1](#)



[Tactical Urbanism 2](#)



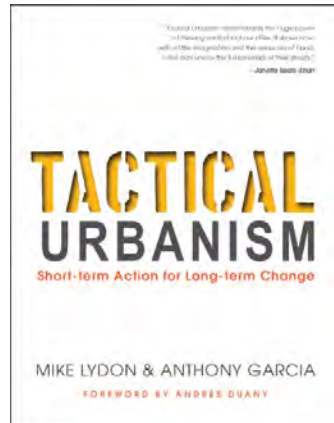
[Tactical Urbanism 3](#)



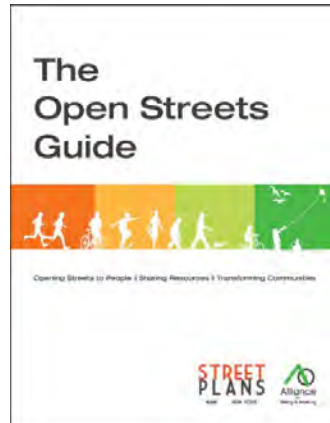
[Tactical Urbanism 4](#)



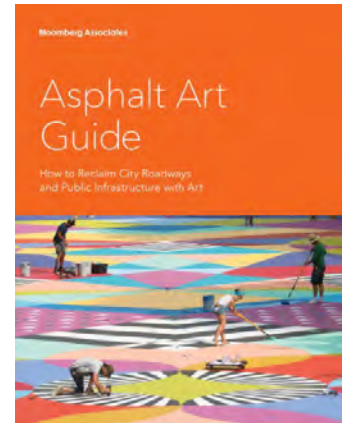
[Tactical Urbanism 5](#)



[Tactical Urbanism:
The Book](#)



[The Open Streets
Guide](#)



[Asphalt Art Guide](#)



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



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

