Northern Valley Greenway

Technical Planning Assistance Report

July 2019

Acknowledgments

The project team would like to recognize and express appreciation to the numerous individuals who contributed information, attended a meeting or workshop, sent in a comment, or otherwise participated in the development of the Northern Valley Greenway Technical Planning Assistance Report. Special thanks to the Northern Valley Greenway Committee for their time and on-going commitment.

PROJECT TEAM

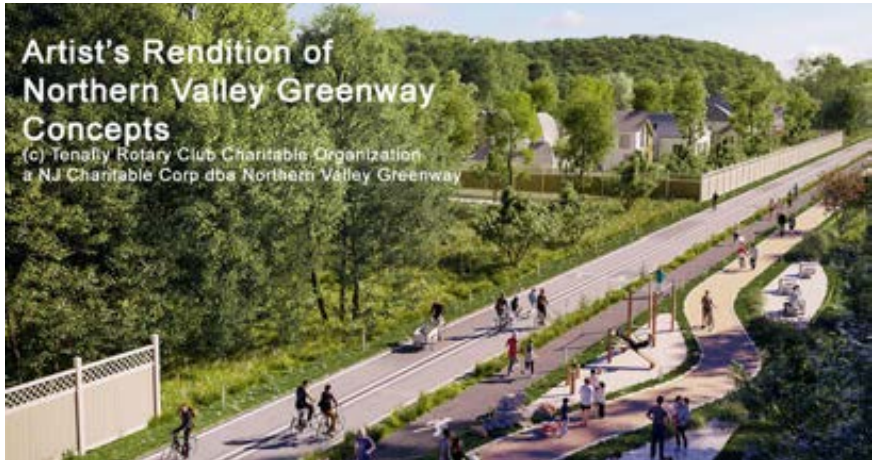
NJDOT Office of Bicycle and Pedestrian Programs,
and Northern Valley Greenway Committee,
with NV5

Contents

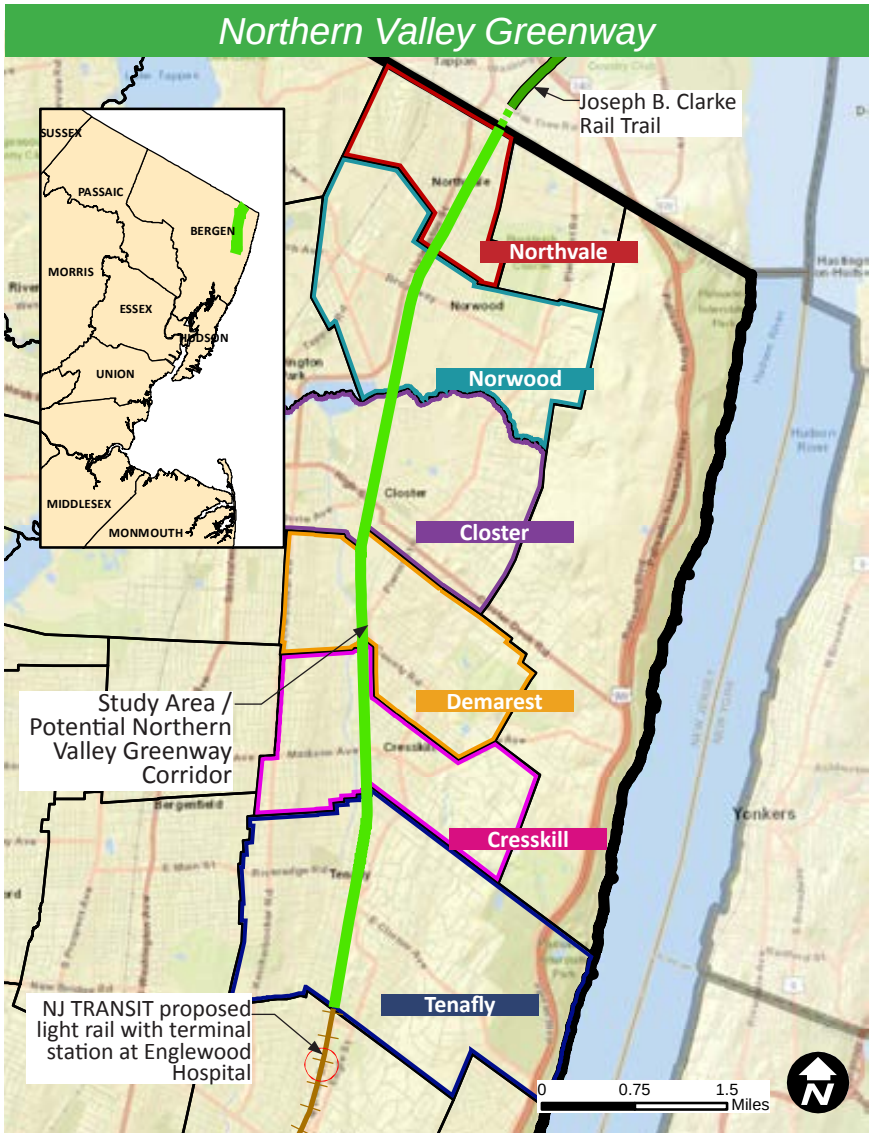
Executive Summary

Introduction

The Northern Valley Greenway is an initiative to create a state-of-the-art recreational pathway and linear park for walkers, joggers, and bicyclists in Bergen County's Northern Valley, a region of 15 municipalities between the Palisades and the Hackensack River. The potential greenway is envisioned to traverse six municipalities over a distance of 7.4 miles, converting the Northern Branch Corridor railroad right-of-way (currently owned by CSX) into a non-motorized transportation and recreation opportunity.



The Northern Valley Greenway Committee has developed several artistic renderings to illustrate the potential of the Northern Valley Greenway. (Image source: www.northernvalleygreenway.org).



Interlocal Initiative

"The Northern Valley Greenway (NVG) is a regional initiative started as a Rotarian Service Project by the three Rotary Clubs along the unused portion of the Northern Branch Corridor: Cresskill/Demarest, Northern Valley and Tenafly. The Rotary Clubs formed a citizens committee and generated public and political support. They worked with the boroughs of Tenafly, Cresskill, Demarest, Closter, Norwood, and Northvale to pass resolutions towards the reuse of the unused railroad corridor as a greenway and to work cooperatively, establishing an interlocal committee, to pursue and advance the initiative.

"The Northern Valley Greenway Committee (NVGC) is the group tasked with advancing the greenway initiative and is the body specifically charged to serve as a forum for coordinating municipal, county, state, federal, and regional agency activities. It is the combination of a Rotarian Service Project and the interlocal municipal Planning Committee created by formal resolutions of the six governing bodies along the unused rail corridor. The Committee consists of mayoral appointees and council liaisons from the six governing bodies, along with Rotary representatives, and is led by the Chairman of the Rotary Service Project, with the concurrence of the mayors of the governing bodies. The Committee is also engaged in activities to publicize the greenway through its website (www.northernvalleygreenway.org) and outreach efforts through local networks and events."

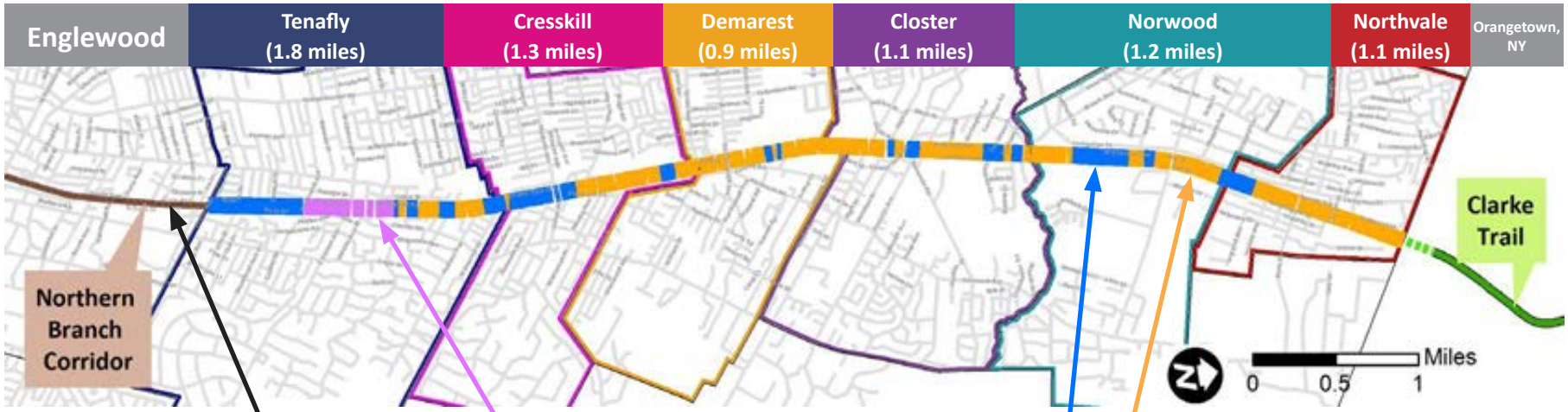
– Northern Valley Greenway Committee, July 2019

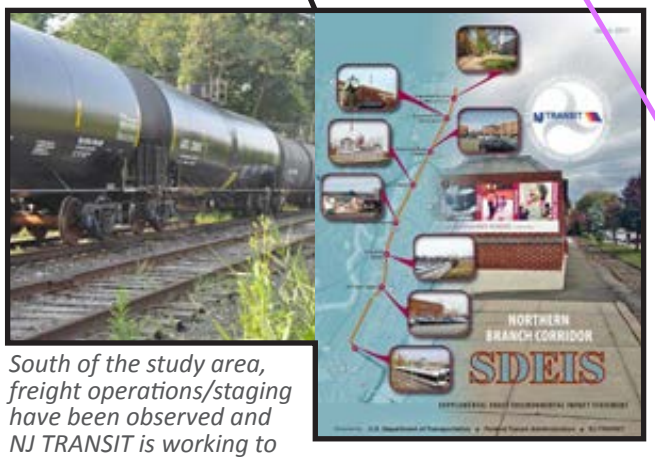
Elected officials, mayors, and representatives from local municipalities, Bergen County, and state and federal legislators, along with volunteers and advocates gathered at the historic Demarest Station, a scenic location along the potential greenway, to mark the kick-off of the NJDOT Technical Planning Assistance Study. (Image source: Northern Valley Press).

The NJDOT Technical Planning Assistance Study (2018-2019) evaluates physical conditions and the potential for bicycle and pedestrian travel along the ±60-foot-wide Northern Branch Corridor to establish an initial understanding of feasibility of the Northern Valley Greenway.

Study Area Assessment

Accounting for the physical characteristics of the Northern Branch Corridor from Tenafly through Northvale, the potential to develop a greenway to accommodate bicycle and pedestrian mobility is generally feasible. As shown in the graphic below, the conditions vary along the right-of-way, but the ultimate design of the greenway can be tailored to work within existing opportunities and constraints. From a physical perspective, no fatal flaws were discovered in the course of this study that would preclude general advancement of the Northern Valley Greenway initiative.





South of the study area, freight operations/staging have been observed and NJ TRANSIT is working to advance an extension of the Hudson-Bergen Light Rail system, which will utilize the Northern Branch Corridor with a terminal station at Englewood Hospital.

Condition 1: Full Width Available (±60')

Condition 2: Limited Constructible Width (<60')

Condition 3: Limited Width Constrained (25'-35')

Along the right-of-way, there are three typical conditions present. Condition 1 (±35% of the study area) is generally optimal for greenway development. Condition 2 (±58% of the study area) has some constraints, such as wetlands or encroachment, but remains suitable for greenway development, provided environmental impacts are minimized. Condition 3 (±7% of the study area) is constrained in width, but remains viable for greenway development.

North of the study area, there is potential to make a connection to the existing Joseph B. Clarke Rail Trail in Rockland County, New York.

Organization of the Report

NJDOT Technical Planning Assistance

In July of 2018, the Northern Valley Greenway Committee was awarded a Technical Planning Assistance Study by the New Jersey Department of Transportation Office of Bicycle and Pedestrian Programs. The objective of the study is to:

- Evaluate the physical conditions of the 7.4-mile right-of-way,
- Identify opportunities and constraints related to the potential for bicycle and pedestrian travel facilities,
- Develop and assess potential planning-level design alternatives for the greenway, and
- Engage and provide opportunities for input by the public and stakeholders.

The study draws upon a diverse array of data and resources to document and conceptualize the 7.4-mile study area as a comprehensible whole. The information synthesized in this report is a resource for ongoing and future project planning, targeted studies, and other steps and milestones that will be necessary to bring a greenway to fruition.

The Technical Planning Assistance Report is organized into four chapters and two appendices. An overview of the approach and contents of each of these components is provided here.

Chapter 1: Draft Purpose and Need Statement

Chapter 1 presents a Draft Purpose and Need Statement as an immediate summary of the purpose, needs, and goals of the Northern Valley Greenway to aid in local communications, project planning, and advancement. It also serves as a template for a final Purpose and Need Statement anticipated as a component of National Environmental Policy Act (NEPA) documentation.

Chapter 2: Opportunities & Constraints Summary

Chapter 2 presents a GIS-based, qualitative, and quantitative inventory and analysis of the study area. The chapter synthesizes a planning-level Opportunities and Constraints Map for each of the six municipalities and covers the following components:

- Opportunity for Regional Connectivity
- Road Crossings Inventory and Assessment
- Bridges and Culverts
- Utilities
- Bus Routes and Stops
- Inventory of Schools and Municipal Points of Interest
- Adjacent Land Use Assessment
- Typical Cross Sections
- Opportunities and Constraints Maps by Municipality

Chapter 3: Environmental Review

Chapter 3 presents an initial, GIS-based ecological/environmental/cultural resources screening. The chapter identifies environmental constraints and resources, assesses the likelihood of environmental impacts, and provides an initial summary of regulatory approvals/permits that would be required. Chapter 3 covers the following components:

- State Planning/Land Use Areas
- Demographics
- Watershed Overview
- Water Quality Monitoring
- Watercourses
- Wetlands / Transition Areas
- FEMA Floodplains / Riparian Zones
- Green Acres/Section 4(f) Properties
- Contaminated Sites Desktop Screening
- Threatened and Endangered Species
- Environmental/Ecological and Cultural Resources Constraints Map
- Anticipated Environmental Permits/Approvals

Chapter 4: Conceptual Alternatives Assessment

Chapter 4 presents an overview and assessment of three planning-level conceptual design alternatives to accommodate a non-motorized travel facility within the study area, including:

- Concept A: Greenway & Linear Park
- Concept B: Shared Use Path
- Concept C: Rail with Trail

An overview and assessment map is provided for each alternative, followed by a comparative assessment in relation to various design criteria and other factors for consideration.

The objective of this chapter is not to determine a preferred design alternative, but to provide useful information that will help the appropriate decision-makers advance a concept through future planning and design processes.

Appendix A: Stakeholder Workshop Memorandum

Appendix A documents the attendance and input recorded at the Stakeholder Workshop conducted on September 26, 2018. The workshop was attended by 81 stakeholders representing various organizations and levels of government who provided input, reactions, and local knowledge to a wide range of considerations for the potential Northern Valley Greenway.

Appendix B: Public Information Center Memorandum

Appendix B documents the attendance and input recorded at the Public Information Center conducted on March 5, 2019. The meeting was attended by 334 people representing each the municipalities in the immediate study area along with many from surrounding towns.

Key Findings

General Feasibility

Within the limits of this study, based on GIS data with limited field observation, no fatal flaws that would preclude general advancement of the Northern Valley Greenway initiative were found to be readily evident.[1] Appropriate next steps may include further analysis, progress toward a strategic plan, and effort to produce a conceptual design with input from the community.

Conceptual Design

The focus of this study was not to develop a design for the potential Northern Valley Greenway. The study does, however, include an assessment of planning-level, conceptual design solutions (Chapter 4) intended to aid in future design decisions and development. Ultimately, the potential design of the Northern Valley Greenway will be developed and customized to minimize environmental impacts and incorporate significant additional input from stakeholders and the public.

Railroad Conditions

"The rails and ties are judged to be in poor to fair condition, which limits the rail speed to 10 MPH [miles per hour]." – 2007 *Appraisal of Northern Branch Rail Corridor, Federal Appraisal & Consulting, Section 12.2.4 – Improvements and Condition, p. 50.*

Local Connectivity

The Northern Valley Greenway has the potential link the following community destinations, all within a half-mile of the study area:

- 20 schools
- 8 libraries/community centers
- 6 downtown/business/commercial zones

Linear Park

The Northern Valley Greenway has the potential to become a linear park roughly 50 acres in size. The greenway can create a direct link among the roughly 200 acres of existing parks and open space that abut the study area, and help to establish connections among the roughly 1,000 acres of existing parks and open space within a half-mile of the study area.

1 Note that this study is conducted at a screening level and excludes the following: Field survey/survey-level base mapping, title research/ROW/encroachments, land cost appraisals, site remediation/testing, structural/scour evaluations, utilities coordination/ detailed mapping, and stormwater management/hydrological and hydraulic studies.

Regional Connectivity

The Northern Valley Greenway has the potential to be a significant component of a greater multimodal mobility network. Potential connections can be planned to points south, including destinations such as the Hudson-Bergen Light Rail extension proposed by NJ TRANSIT, Overpeck Park, and the George Washington Bridge. Potential connections can also be planned to points north, beginning with the Joseph B. Clarke Rail Trail and extending into the State of New York.

Road Crossings

The Northern Valley Greenway would potentially intersect the roadway network at 16 locations. Safe crossings can be established through the design and application of appropriate warning signs, striping, beacons, and modifications to existing traffic signals. There are no road crossings that would necessitate the expense of a bridge or tunnel for the greenway.

Bridges and Culverts

The existing railroad crosses six bridges and six culvert structures through the study area. There is potential to re-purpose these structures to establish crossings for bicyclists and pedestrians.

Utilities

Based on field observation, it is evident that various utilities are present in the Northern Valley Greenway study area, including overhead electrical transmission and distribution lines and buried fiber optic cable. A title search and coordination with utility owners should be conducted to establish a design approach that accommodates the needs and requirements of utility owners.

Environmental Permitting

Based on GIS analysis, the Northern Valley Greenway study area traverses environmentally sensitive areas (wetland, floodplain, and riparian zone) over approximately 30% of the 7.4-mile corridor. This assessment can be refined through future efforts to field verify and delineate environmentally sensitive areas and establish a design approach to minimize impacts. It is anticipated that the following individual permits/approvals will be required:

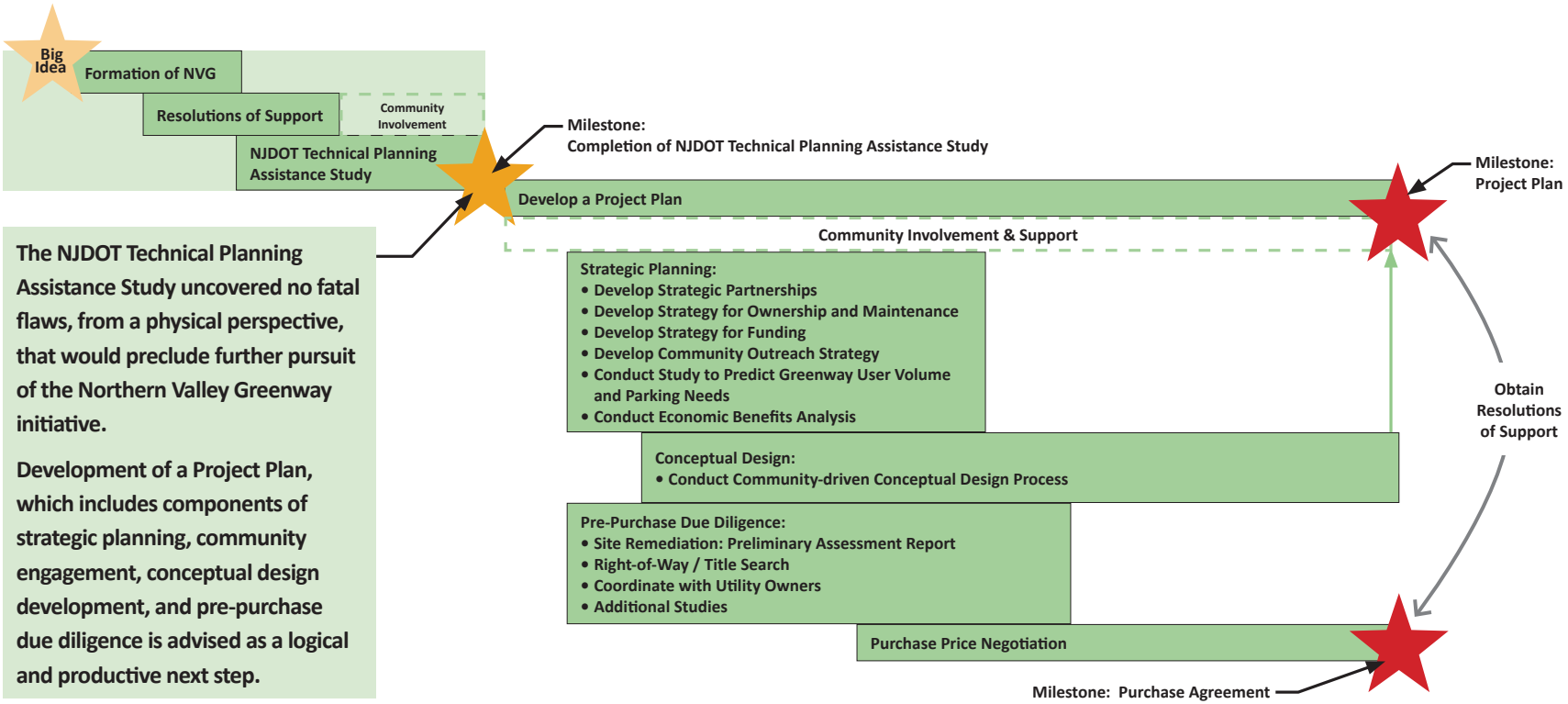
- NJDEP Freshwater Wetlands Permit (N.J.A.C. 7:7A)
- NJDEP Flood Hazard Area Permit (N.J.A.C. 7:13)
- NJDEP Stormwater Management (N.J.A.C. 7:8)
- NJDEP NJ Pollution Discharge Elimination System General
- Permit for Construction Stormwater Discharge (N.J.A.C. 7:14A)
- NJDEP New Jersey Historic Preservation Office (N.J.A.C. 7:4)
- Bergen County Soil Conservation District

Next Steps

Advancing the Northern Valley Greenway initiative will require significant effort, coordination, and dedication of resources. The following process diagram has been developed based on the findings of this study along with general knowledge of development processes for similar projects. Meaningful public engagement remains a key consideration in all phases of project advancement.

PHASE 1

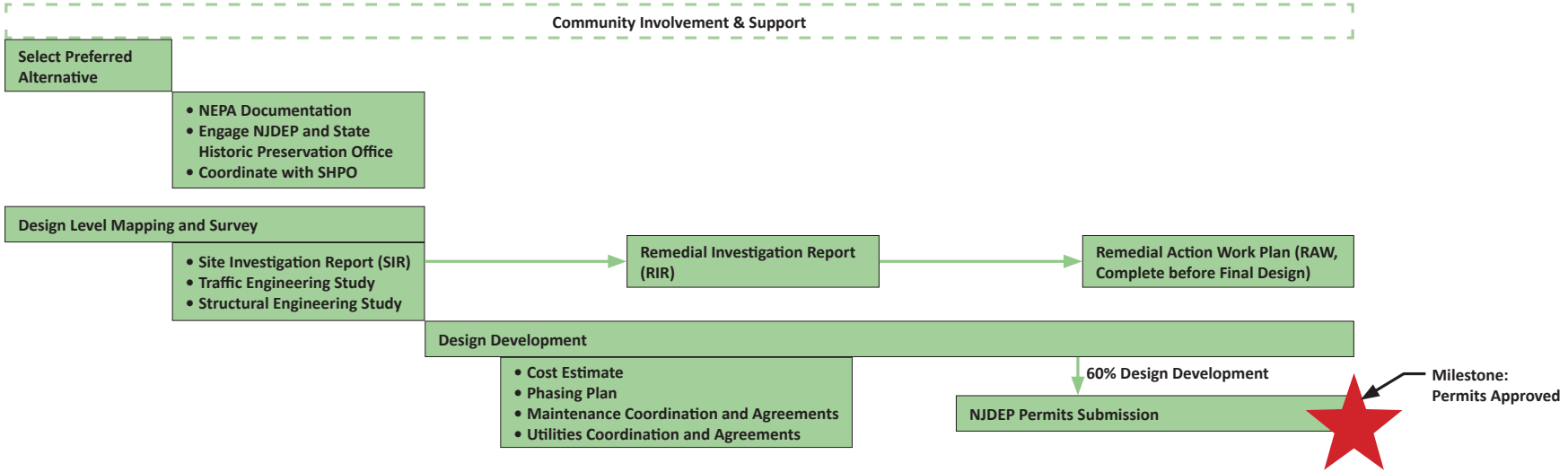
Project Initiation / Concept Development



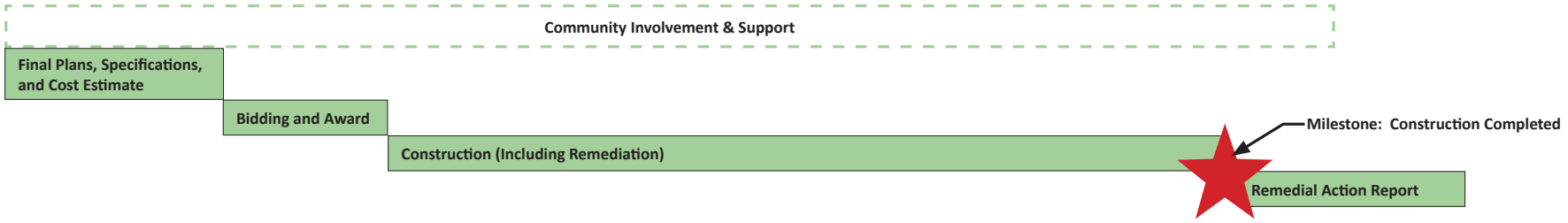
The NJDOT Technical Planning Assistance Study uncovered no fatal flaws, from a physical perspective, that would preclude further pursuit of the Northern Valley Greenway initiative.

Development of a Project Plan, which includes components of strategic planning, community engagement, conceptual design development, and pre-purchase due diligence is advised as a logical and productive next step.

PHASE 2 Preliminary Engineering



PHASE 3 Final Design & Construction



Funding Guidance

Funding the next steps in project advancement is a continual challenge. Government funding sources are highly competitive and funding programs vary not only by the type of project they cover, but also in the phase of development of a project (planning, design, or construction). When pursuing funding opportunities, the Northern Valley Greenway Committee can benefit from the following guidance and practices:

• **Funders look for documented support** from government (local, regional, state), the public, and any other stakeholder entities (e.g. non-profit organizations, private funders, business community). Funders typically do not want to be the first to invest, so evidence of prior funding, grants, or secured money can become convincing evidence for new funding sources. The NJDOT Technical Planning Assistance Study is a great start.

• **Funders evaluate the capacity of the applicant to manage grant funds**, which can be onerous, especially from government sources. They will not provide funding to volunteer groups or even small non-profits with limited capacity to administer and account for funds. It will be advantageous, and likely necessary, to seek strategic partnerships with appropriate government entities to administer and account for funds on behalf of the Northern Valley Greenway Committee.

• **Funders evaluate the potential for project success.** Looking ahead and showing that critical factors have been anticipated is essential. Most important is identifying a strategic plan for ownership and even future maintenance. There are examples of all kinds of partnerships and cooperative arrangements for greenway development, ownership, liability, and maintenance.

• **Continue to hold face-to-face meetings** with mayors and council members, Bergen County, NJTPA, and Together North Jersey. Municipalities, counties, and MPOs (NJTPA in this study area) may help with identifying next steps and possible funding sources. They can also point out how the Northern Valley Greenway fits into existing plans and guidance documents, which should be noted in any funding application.

• **Coordinate with municipal planners, engineers, commissions, and committees** and keep them informed of new developments. Avoid competing with municipalities applying for funding from the same sources – at the very least, make sure they are informed.

• **Document outreach** to the general public, businesses, schools, and other stakeholders. Demonstrated public support is essential. Consider assigning documentation of support as dedicated role for one of the Northern Valley Greenway Committee members.

• **Local and/or county governments may be able to provide planning and engineering services** that can benefit the project. Many funding programs require that the applicant match a percentage of the total award either with a financial contribution or an appropriate work effort that is financially equivalent to a required percentage of the award. Local and/or county governments may be able to provide planning and engineering services that meet matching requirements for different funding programs.

• **Document volunteer labor,** including the hours of labor of the Northern Valley Greenway Committee and other volunteers for events and activities. Independent Sector measures the value of volunteer time in New Jersey at $28.82 per hour. The commitment to provide volunteer services (substantiated in writing) can sometimes be used as a funding match in lieu of cash when allowed by the granting organization.

• **Reach out to grantors** prior to submission with a question or two. Name recognition and some personal connection may help when decisions are made.

• **Phasing projects is essential.** Identify segments for development that have rational beginning and endpoints that are immediately useful. As a rule of thumb, it may cost $1-2 million per mile[1] to build a greenway, not including acquisition. Funding a project at the scale of the Northern Valley Greenway from beginning to end from a single source is unlikely (most awards are capped below $1 million).

• **Funding a pilot project** that demonstrates proof of concept may be a strategy that leads to future success. Having a section of the Northern Valley Greenway completed will go a long way to continually building wide support and obtaining additional funding.

1 Rails-to-Trail Conservancy, http://www.railstotrails.org/resource-library/resources/cross-camden-county-trail-feasibility-plan/

Funding Sources

The following table summarizes funding sources that are typically available for trails, greenways, and other non-motorized transportation projects. The details and requirements of these sources and programs are subject to change. All program requirements should be thoroughly understood prior to submission for funding. It is recommended that direct outreach be made to funding source contact persons for review and response to project-specific questions, in order to ensure that the potential project, phase of development, and funding recipient are appropriate and eligible for the program.

Funding Source	Program	Planning & Design	Capital Projects		Programs
			On-Road	Off-Road	
Federal	Congestion Mitigation and Air Quality Improvement (CMAQ) Program		■		■
	Transportation Alternatives Set-Aside		■	■	■
	National Park Service - Rivers, Trails, and Conservation Assistance Program				■
	Safe Routes to School Program (SRTS)		■	■	■
State or Regional	NJDOT - County & Municipal Aid		■		
	NJDOT - Bikeway Grant Program		■	■	
	NJDOT - Safe Streets to Transit		■		
	NJDOT - Local Bicycle/Pedestrian Planning Assistance Program		■	■	
	NJDOT - Local Planning Assistance	■			
	NJDEP - Green Acres Program				■
	NJDEP - Recreational Trails Program			■	■
	Metropolitan Planning Organizations (MPOs: NJTPA, DVRPC, SJTPO - multiple programs, e.g. NJTPA Subregional Studies, Planning for Emerging Centers Program)	■	■	■	■
Other	County and Municipal Line-Item Allocations	■	■	■	■
	Municipal/County Open Space Bonds/Trust Funds	■	■	■	■
	New Jersey Transportation Infrastructure Bank		■	■	■

CHAPTER

1

Draft Purpose and Need Statement

Northern Valley Greenway

Technical Planning Assistance Report

June 2019

Chapter 1 Contents

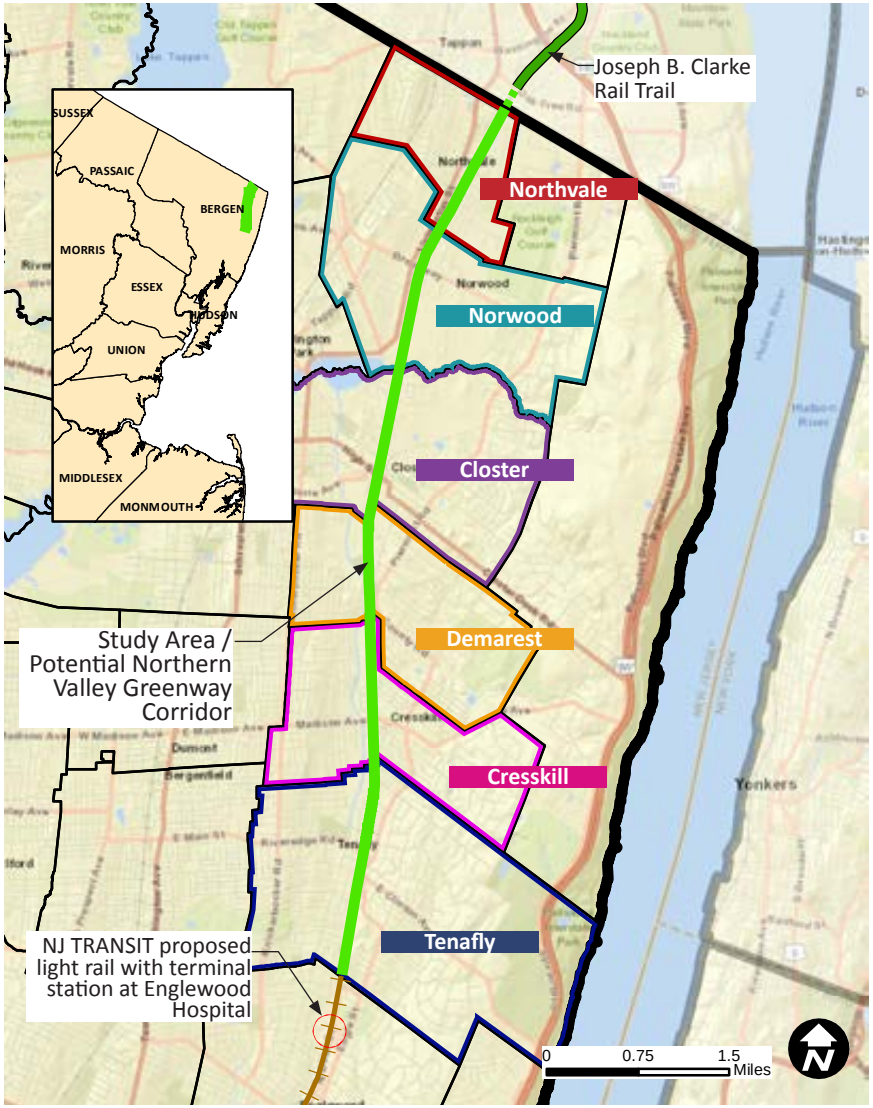
1.1 Introduction

The Northern Valley Greenway is an initiative to create a state-of-the-art, recreational pathway and linear park for walkers, joggers, and bicyclists in Bergen County's Northern Valley, a region of 15 municipalities between the Palisades and the Hackensack River. The potential greenway is envisioned to traverse six municipalities over a distance of 7.4 miles, converting the Northern Branch Corridor railroad right-of-way (currently owned by CSX) into a non-motorized transportation and recreation opportunity.

The Northern Valley Greenway is envisioned to connect the economic centers of Tenafly, Cresskill, Demarest, Closter, Norwood, and Northvale. At its southern extent, the greenway is envisioned to create a regional, multi-modal connection to the proposed Hudson-Bergen Light Rail terminal station at the Englewood Hospital and Medical Center. At its northern extent, the greenway is envisioned to create a regional, non-motorized link to the Joseph B. Clarke Rail-Trail in New York with access to the regionally significant Hudson Valley Greenway.

This chapter provides a Draft Purpose and Need Statement that has been developed through an initial, desktop-based feasibility assessment of the potential greenway corridor with input from stakeholders and the public. This Draft Purpose and Need Statement serves as both an immediate summary of the purpose, needs, and goals of the Northern Valley Greenway (to aid in local communications and project planning and development) and as a long-term template for the Purpose and Need Statement that can, as subject to revision through future studies, be submitted as a component of future National Environmental Policy Act (NEPA) documentation.

Map 1.1 Study Area



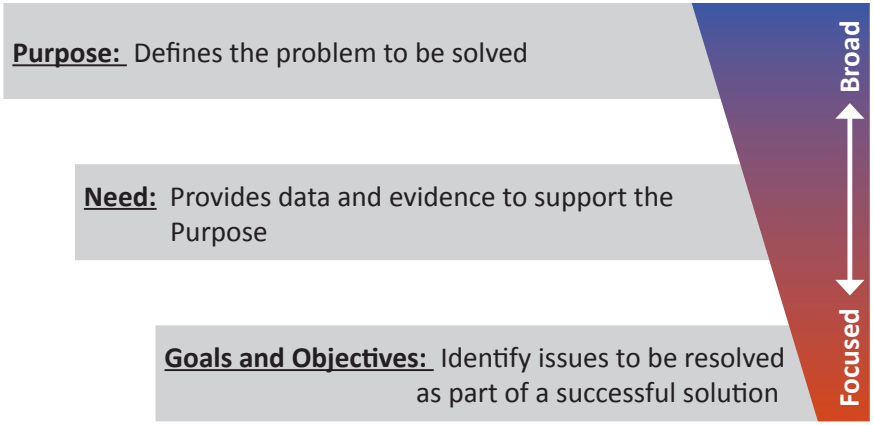
1.2 What is a Purpose and Need Statement?

The process of converting an unutilized railroad corridor into a non-motorized transportation facility is a significant and intensive infrastructure project with potential impacts to the local environment. The process will require public involvement; detailed studies to inform permitting and regulatory decisions; design and engineering to address environmental, traffic, safety, and local issues; construction and oversight; and long-term maintenance and management. It is highly likely that the process, either in full or in part, would be funded through federal funding sources, thus requiring and engaging the National Environmental Policy Act (NEPA) review process.

A Purpose and Need Statement is a fundamental requirement when developing a project proposal that will require NEPA documentation. A Purpose and Need Statement is a component of the documentation submitted for NEPA review in the form of either an *Environmental Assessment/Finding of No Significant Impact* (EA) or an *Environmental Impact Statement* (EIS).

A Purpose and Need Statement explains the reason a project is being proposed and the expected achievements of that project in relationship to the local context. The Purpose and Need Statement provides the background against which alternative solutions can be considered and evaluated.

A Purpose and Need Statement typically consists of three component parts: Purpose, Need, and Goals and Objectives. The Purpose identifies the general problem or issue that a project can solve. The Need identifies the reasons that a project is necessary. The Goals and Objectives identify the issues that will be addressed or improved as a result of the project.



Stakeholders have the opportunity to review and comment on draft Purpose and Need Statement components at the Stakeholder Workshop conducted on September 26, 2018.

1.3 Methodology

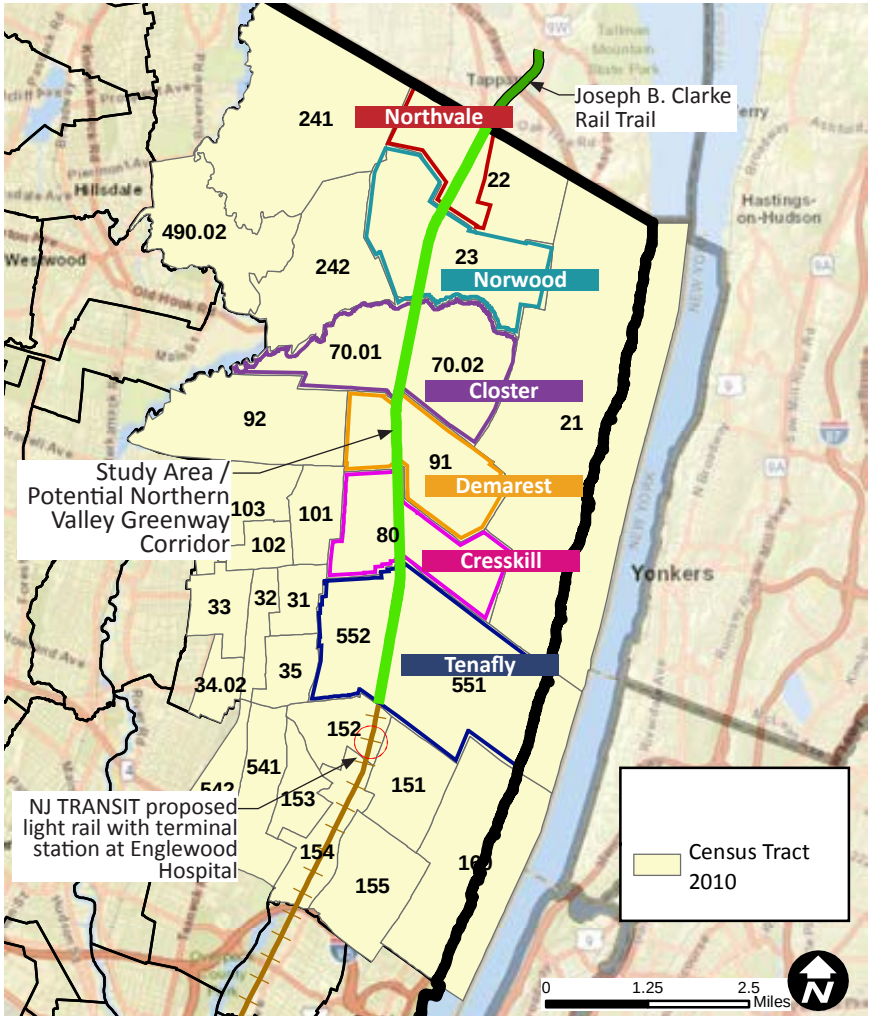
The Draft Purpose and Need Statement presented in this chapter is based on:

- Priorities expressed by the Northern Valley Greenway Committee,
- Input collected at the Stakeholder Workshop on September 26, 2018 (as recorded in the *Appendix A: Stakeholder Workshop Memorandum*) and conversations with other key stakeholders (NJ TRANSIT, NJDOT Rail, Bergen County)
- Desktop/GIS-based environmental assessment of the Northern Branch Corridor (as recorded in *Chapter 3: Environmental Review*)
- Desktop/GIS-based assessment of opportunities and constraints local to the potential greenway corridor (as recorded in *Chapter 2: Opportunities and Constraints*).

The consultant team first developed and presented a draft Purpose and Need Statement at the Stakeholder Workshop on September 26, 2018. An input station was provided and staffed at the workshop to communicate initial draft components and collect stakeholder input. Those draft components have been revised and expanded in this chapter to account for stakeholder comments and synthesis/findings of subsequent investigatory work tasks.

The components of the Need portion of the Purpose and Need Statement have been documented with supporting facts determined through analysis of the potential greenway corridor. In general, where a need that is regional in nature is presented, the analysis is based on a study area of 29 census tracts within 2 miles of the greenway corridor, as shown in Map 1.2. Endnotes are provided to document the sources upon which findings are based.

Map 1.2. 2010 Census Tracts by Name



1.4 Draft Purpose and Need Statement

Northern Valley Greenway Purpose

The purpose of the Northern Valley Greenway is to improve safety and mobility for non-motorized travelers, provide access to transportation and recreational opportunities, and relieve traffic congestion in the areas surrounding the Northern Branch Corridor railroad right-of-way. By converting the railroad right-of-way (described by project initiators as unutilized and unsightly) to accommodate non-motorized travel, local communities will benefit from:

- Wider transportation choices, including off-road transportation for bicyclists and pedestrians,
- Improved connections to public transit,
- Improved connections among schools and other educational opportunities, along with community centers and health facilities,
- Improved non-motorized and multimodal connections among local economic centers that support local economic development,
- Improved access to recreation and exercise,
- Improved local aesthetics,
- Future opportunities to connect to regional trail networks and open space, and
- Potential for planned ecological regeneration of the railroad corridor.

Northern Valley Greenway Need

The Northern Valley Greenway initiative builds on an opportunity to convert unutilized and unsightly railroad right-of-way (as described by project initiators) into a shared regional asset with transportation, recreational, and economic benefits. The need for the Northern Valley Greenway has been identified through stakeholder outreach and a desktop/GIS-based assessment of existing conditions, and includes the following:

1. The potential greenway corridor traverses an established, densely settled suburban environment with scant opportunity for significant non-motorized transportation.
   A. According to 2016 American Community Survey (ACS)[1] data, the population of the 29 census tracts within two miles of the potential greenway corridor is 158,427 persons with 57,247 housing units.
   B. In 2017, the six municipalities of Tenafly, Cresskill, Demarest, Closter, Norwood, and Northvale had a population density of approximately 3,000 persons per square mile, compared to 1,225 persons per square mile in New Jersey.[2]
   C. According to the 2016 ACS data, the housing density of the six municipalities of Tenafly, Cresskill, Demarest, Closter, Norwood, and Northvale is 1,037 housing units per square mile, which is more than three times higher than New Jersey (484 housing units per square mile.)[3]
2. The population is expected to increase, placing additional pressure on the existing transportation systems.
   A. According to 2010 Census Data and the 2016 ACS, from 2010 to

2016, the population of the 29 census tracts within two miles of the potential greenway corridor increased by 3% (from 154,235 persons to 158,427) and the population for the six study area municipalities is projected to increase by 7% in 2045 as per NJTPA Population Forecasts.[4]

3. The Northern Branch Corridor in the study area is underutilized as a railroad.

   A. According to the Appraisal of Northern Branch Rail Corridor by Federal Appraisal & Consulting in 2007, "The rails and ties are judged to be in poor to fair condition, which limits the rail speed to 10 MPH [miles per hour]."[5]

   B. According to the Appraisal of Northern Branch Rail Corridor by Federal Appraisal & Consulting in 2007, "...the highest and best use of the Property [Northern Branch Corridor] is not as a continued use as a freight rail line, because the market value of the land underlying the Corridor has a higher, i.e. maximally productive, value if used as the neighboring properties are used, which is not as a rail corridor."[6]

4. Current transportation systems are roadway-based with reasonable access only to transit bus.

   A. The six municipalities of Tenafly, Cresskill, Demarest, Closter, Norwood, and Northvale have bus service by NJ TRANSIT, Rockland Coaches, or Saddle River Tours on six service lines with eight bus stops within 1,000 feet of the potential greenway corridor.[7]

   B. According to the 2016 ACS, in the 29 census tracts within two miles of the potential greenway corridor, roughly 14% of workers take public transit to work and more than 3% walk or bicycle to work.[8] Developing the Northern Valley Greenway can improve non-motorized transportation and access to transit for these roughly 12,000 workers and attract new commuters to multi-modal transportation options.

   C. The NJ TRANSIT Pascack Valley Line is located roughly 3.5 miles west of the potential greenway corridor on the opposite side of the Hackensack River and is difficult to access from the study area via non-motorized transportation. A future connection of the Northern Valley Greenway to the proposed Hudson-Bergen Light Rail[9] terminal station at Englewood Hospital and Medical Center has the potential to create viable non-motorized access to light rail transit in the general study area.

5. Current transportation systems are affected by recurring traffic congestion due to prevalence of single-occupancy vehicles.

   A. According to the 2016 ACS data[10], almost 80% of the workers in the 29 census tracts within two miles of the potential greenway corridor commute to work in a car, truck or van. Additionally, almost 90% of the workers that commute by car, truck, or van to work drive alone.

6. Increased congestion will negatively impact the region.

   A. As the population increases (it is expected to increase by 8% in 2045 as per NJTPA Population Forecasts[11]), traffic congestion may also be expected to increase.

   B. According to 2010 Census Data and the 2016 ACS, the mean travel time to work for the study area increased by 8% from 32 minutes to 34.5 minutes.[12]

7. Traffic volume, safety concerns, and the lack of bicycle infrastructure limit the ability for students to walk or bicycle to school.

   A. There are 12 schools within a 10-minute walk of the potential greenway corridor.[13]

   B. The existing railroad right-of-way is impermeable; that is, people are only supposed to cross that railroad at designated crossing locations. This creates traffic congestion peaks associated with school drop-off and pick-up. A safe, off-road pedestrian and bicycle facility can support local students' ability to walk or bicycle to school, thereby reducing traffic congestion associated with schools.

   C. A greenway may create opportunities to provide select additional traffic crossings to alleviate congestion in business areas and during school drop-off and pick-up.

8. Business and commercial zones along the potential greenway corridor are difficult to access, except by automobile.

   A. The potential greenway corridor passes directly through six business and commercial zones in Tenafly, Cresskill, Demarest, Closter, Norwood, and Northvale.[14]

   B. Historically, the business and commercial zones along the corridor were developed in interdependence with an operational railroad to connect people and products with market and service areas. Lacking an operational railroad to connect people and products with market and service areas, business and commercial zones can become starved of potential revenue sources.

   C. A greenway that serves as an attraction and links the six business and commercial zones with regional connections in Englewood (future light rail) and New York (Hamlets of Sparkill, Orangeburg, and points north, Joseph B. Clark Trail, and Hudson Valley Greenway) can make new revenue sources accessible to businesses in Tenafly, Cresskill, Demarest, Closter, Norwood, and Northvale.

9. Dense settlement patterns impact the region's ability to provide sufficient open space and recreation opportunities.

   A. According to the New Jersey Conservation Blueprint, there are several "green space deficit zones" in the six municipalities of Tenafly, Cresskill, Demarest, Closter, Norwood, and Northvale.[15] By developing the greenway, these residential areas will benefit from access to open space and recreational land within walking distance.

   B. Developing the Northern Valley Greenway will have the potential to improve regional access and connectivity to other open space, trails, and greenways such as Joseph B. Clarke trail and Hudson Valley Greenway in New York, Overpeck County Park, and Palisades Interstate Park.

10. There is significant public interest in developing the Northern Valley Greenway.

   A. Each of the municipalities through which the potential greenway may pass[16] (Tenafly, Cresskill, Demarest, Closter, Norwood, and Northvale) along with neighboring municipalities (Alpine, Bergenfield, Englewood Cliffs, Harrington Park, Old Tappan, and Rockleigh) has passed a resolution in support of the initial investigation, planning, and other activities necessary to advance the reuse of the Northern Branch Corridor as a greenway.

   B. A web-based petition to establish the Northern Valley Greenway has collected over 1800 signatures in support of the effort.[17]

1.5 Northern Valley Greenway Goals and Objectives

Goal 1: Reduce traffic congestion and meet the transportation needs of non-motorized travelers

Objectives:

- Provide non-motorized options for travelers
- Create connections to local destinations, bus stops, businesses, open space, and amenities for pedestrians, bicyclists, joggers, and other non-motorized travelers
- Improve travel time for local trips
- Attract travelers to non-motorized transportation, thereby reducing dependence on single-occupancy vehicles
- Improve transportation options for low-income travelers

Goal 2: Improve safety for non-motorized travelers

Objectives:

- Provide a safe facility for pedestrians, bicyclists, joggers, and other non-motorized travelers to access local destinations
- Provide safe routes to local schools
- Provide an alternative to bicycling on Route 9W
- Provide an alternative to bicycling on County Road (CR-501)
- Provide healthy transportation options

Goal 3: Improve regional mobility and access

Objectives:

- Create a connection to the Joseph B. Clarke Rail-Trail in Orangetown, NY to ultimately link with the Hudson River Valley Greenway system
- Create a connection to the Hudson-Bergen Light Rail station at Englewood Hospital & Medical Center proposed by NJ TRANSIT

Goal 4: Support local economic growth and character

Objectives:

- Provide a platform for improved physical linkages among the economic centers of the municipalities in the study area
- Provide a regional attraction that drives economic growth through tourism, yet blends into the development patterns and local character of the host municipalities
- Enhance access to transit bus stops

Goal 5: Provide open space/recreation opportunities

Objectives:

- Repurpose an underutilized corridor in a densely settled region to provide recreational, environmental, and health benefits
- Provide a range of recreational, civic, and/or cultural facilities
- Provide a sustainable, ecologically responsible corridor
- Develop and coordinate outdoor, natural, and ecological curricula for local schools and nature centers
- Develop an approach to ecological regeneration for the corridor

Endnotes

1 U.S. Census Bureau; American Community Survey, 2012-2016 American Community Survey 5-Year Estimates, Table DP05; generated by NV5; using American FactFinder; <https://factfinder.census.gov/ >; (November 2018).

2 Population Density by County and Municipality, https://www.state.nj.us/health/fhs/primarycare/documents/Rural%20NJ%20density2015-revised%20municpalities.pdf , accessed November 2018.

3 U.S. Census Bureau; American Community Survey, 2012-2016 American Community Survey 5-Year Estimates, Table B25001; generated by NV5; using American FactFinder; <https://factfinder.census.gov/ >; (November 2018).

Population Density by County and Municipality, https://www.state.nj.us/health/fhs/primarycare/documents/Rural%20NJ%20density2015-revised%20municpalities.pdf , accessed November 2018.

4 See table below:

Population (2010-2045)

Geography	Census 2010	ACS 2016	NJTPA 2045	Change from 2016	% Change from 2016
Closter borough	8,373	8,650	9,040	390	5%
Cresskill borough	8,573	8745	9,449	704	8%
Demarest borough	4,881	5,007	5,497	490	10%
Northvale borough	4,640	4,801	5,224	423	9%
Norwood borough	5,711	5,828	6,339	511	9%
Tenafly borough	14,488	14,821	15,763	942	6%
Total for Study Area Municipalities	**46,666**	**47,852**	**51,312**	**3,460**	**7%**

5 Appraisal of Northern Branch Rail Corridor, Federal Appraisal & Consulting, 2007, Section 12.2.4 – Improvements and Condition, p. 50.

6 Appraisal of Northern Branch Rail Corridor, Federal Appraisal & Consulting, 2007, Section 13.4.5.1 – Overall Business Value, p. 61.

U.S. Census Bureau; Census 2010, Summary File 1, Table P1; generated by NV5; using American FactFinder; <https://factfinder.census.gov/ >; (November 2018).

U.S. Census Bureau; American Community Survey Demographic and Housing Estimates, 2012-2016 American Community Survey 5-Year Estimates, Table DP05; generated by NV5; using American FactFinder; <https://factfinder.census.gov/ >; (November 2018).

NJTPA Population Forecast data for municipalities. https://www.njtpa.org/data-maps/demographics/forecasts

7 NJ TRANSIT GIS dataset *NJ TRANSIT Bus Routes Currently Operating, 2016*, published by NJ Office of Information Technology, February 2016, accessed October 2018. Rockland Coaches Scheduled Services, https://web.coachusa.com/rockland/, accessed November 2018. Saddle River Tours New 20/84 Schedule Effective 09/04/2018, https://www.srtbus.com/_content/commuter_schedules/Route%2020-84%20New%20Service%20Effective%209-4-18.pdf, accessed January 2019.

8 U.S. Census Bureau; American Community Survey Demographic and Housing Estimates, 2012-2016 American Community Survey 5-Year Estimates, Table S0801; generated by NV5; using American FactFinder; <https://factfinder.census.gov/ >; (November 2018).

9 Northern Branch Corridor Project: http://www.northernbranchcorridor.com/, accessed November 2018.

10 U.S. Census Bureau; American Community Survey Demographic and Housing Estimates, 2012-2016 American Community Survey 5-Year Estimates, Table S0801; generated by NV5; using American FactFinder; <https://factfinder.census.gov/ >; (November 2018).

11 NJTPA Population Forecast data for municipalities. https://www.njtpa.org/data-maps/demographics/forecasts .

12 U.S. Census Bureau; American Community Survey Demographic and Housing Estimates, 2006-2010 American Community Survey 5-Year Estimates, Table S0801; generated by NV5; using American FactFinder; <https://factfinder.census.gov/ >; (November 2018).

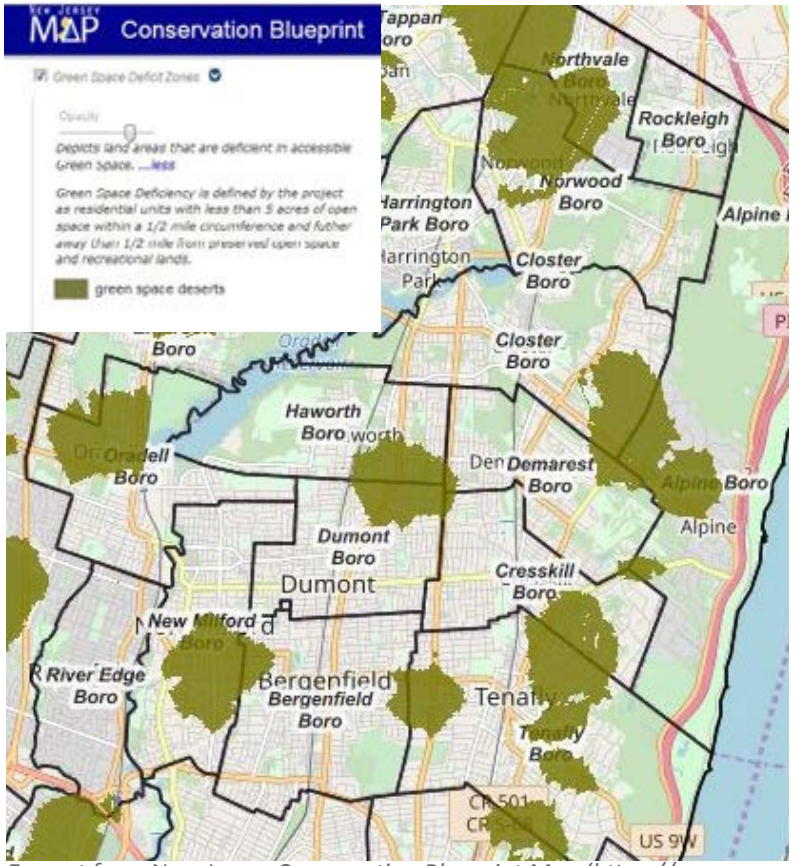
U.S. Census Bureau; American Community Survey Demographic and Housing Estimates, 2012-2016 American Community Survey 5-Year Estimates, Table S0801; generated by NV5; using American FactFinder; <https://factfinder.census.gov/ >; (November 2018).

13 GIS dataset *New Jersey Public, Non-public, and Charter School point locations (2017),* published by NJ Office of Information Technology, June 2018, accessed October 2018.

14 Zoning Maps for project corridor municipalities:

- Tenafly: 2013 Land Use Element, Land Use Plan map, June 21, 2013.
- Cresskill: Zoning Map, Borough of Cresskill – Bergen County – New Jersey, April 9, 2008.
- Demarest: Zoning Map, Borough of Demarest, New Jersey, November 1966 and Demarest Land Use Element Update, April 10, 1996.
- Closter: Zoning Map, Borough of Closter, May 1, 2015.
- Norwood: Existing Zoning Map, Borough of Norwood, New Jersey Mater Plan Reexamination, August 2008.
- Northvale: Borough of Northvale Zoning Map, November 11, 2009.

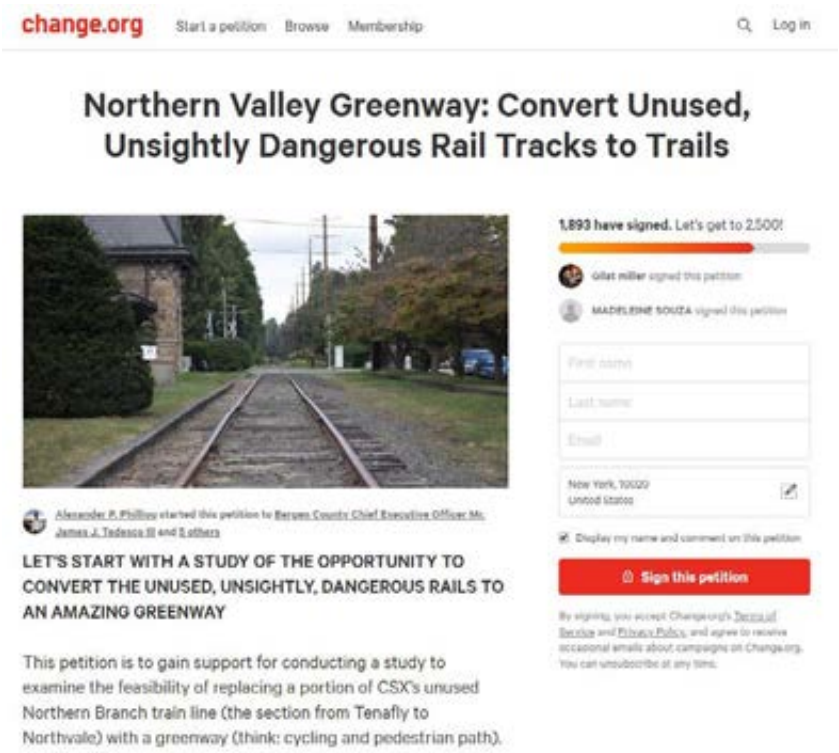
15 The New Jersey Conservation Blueprint is a project by the Nature Conservancy and the New Jersey Conservation Foundation with Rowan University and a consortium of groups. The goal is to "develop a shared, living blueprint of lands to be protected in the next few decades." "Green Space Deficiency is defined by the project as residential units with less than 5 acres of open space within a 1/2 mile circumference and further away than 1/2 mile from preserved open space and recreational lands." https://www.njmap2.com/blueprint/



Excerpt from New Jersey Conservation Blueprint Map (https://www.njmap2.com/blueprint/), see endnote 13.

16 Municipal Resolutions:
Tenafly: Resolution # R17-67, January 24, 2017
Cresskill: February 15, 2017
Demarest: February 6, 2017
Closter: January 25, 2017
Norwood: Resolution # 17:46, February 2017
Northvale: Resolution # 2017-27

17 Web-based Petition: https://www.change.org/p/northern-valley-greenway-convert-unused-unsightly-dangerous-unused-tracks-to-trails, accessed December 2018. Screen capture 12/05/2018:



CHAPTER

2

Opportunities and Constraints

Northern Valley Greenway

Technical Planning Assistance Report

July 2019

Chapter 2 Contents

2.1 Introduction

This chapter presents a GIS-based, qualitative, and quantitative physical inventory and analysis of the Northern Valley Greenway project corridor. Working within the context of existing conditions, this chapter provides background information that will help to inform future greenway routing decisions (within the right-of-way) and facility design issues.

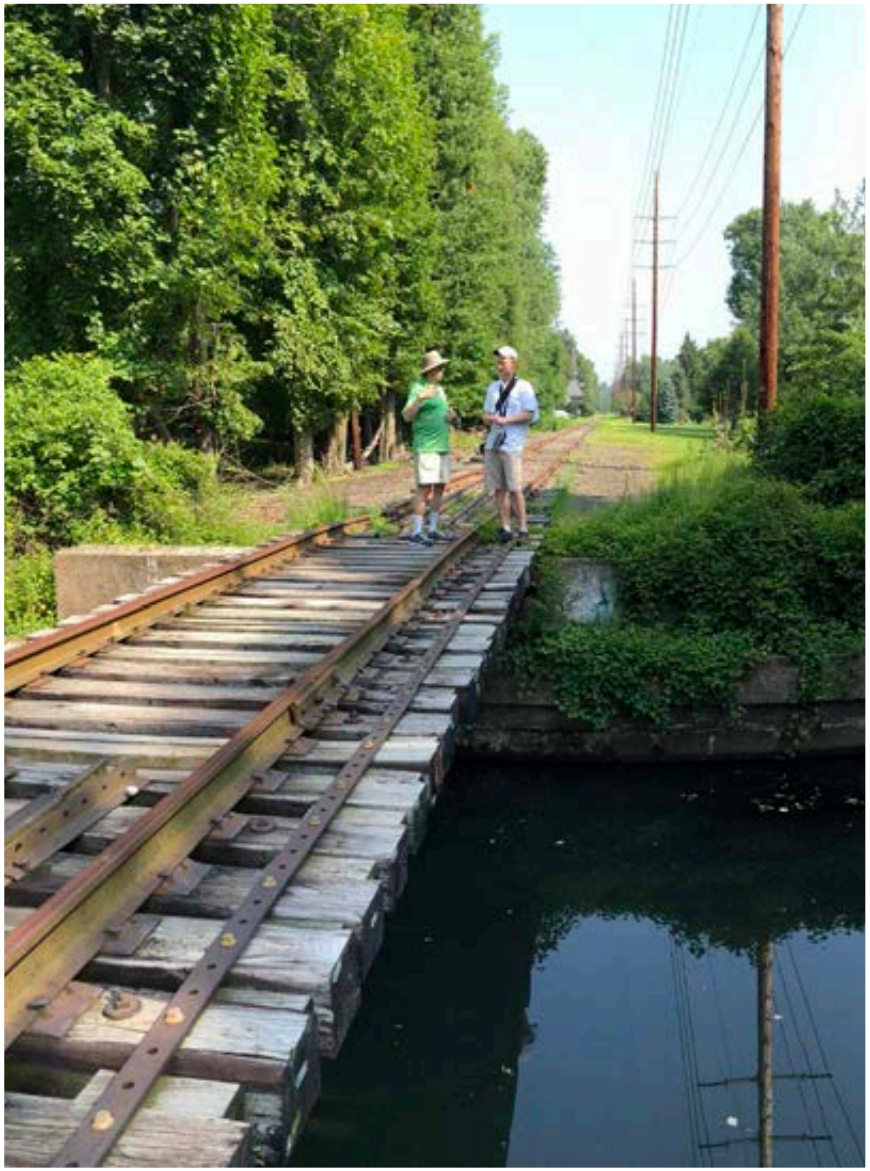
The analysis builds from a foundation of:

- GIS data,
- Limited field observation/assessment,
- Input provided by the Northern Valley Greenway Committee, and
- Input collected from the Stakeholder Workshop (09/26/2018), Public Information Center (03/05/2019), and conversations with other key stakeholders (NJ TRANSIT, NJDOT Rail, Bergen County).

As a component of a planning level project, this analysis excludes:

- Field survey/Survey base mapping
- Title Research/ROW/Encroachments
- Land Cost Appraisals
- Site Remediation/Testing
- Structural/Scour Evaluations
- Utilities coordination/detailed mapping
- Stormwater management/Hydrological and Hydraulic studies

Building upon and in concert with *Chapter 3: Environmental Review,* this inventory and analysis arrives at the synthesis of a planning-level Opportunities and Constraints Map Series for the Northern Valley Greenway.



2.2 Study Area Overview

Study Area

The study area for the potential Northern Valley Greenway encompasses a portion of the Northern Branch Corridor, a railroad corridor that is currently owned by CSX, as it traverses a distance of approximately 7.4 miles through six boroughs in Bergen County: (from north to south) Northvale, Norwood, Closter, Demarest, Cresskill, and Tenafly. The study area extends from the New Jersey/New York State line (also the northern border of Northvale) to the approximate southern border of Tenafly.

The study area is a portion of the Northern Branch Corridor, which extends approximately 14.9 miles from the New Jersey/New York State line to 69th Street in North Bergen. South of Tenafly, this includes the municipalities of Englewood, Leonia, Palisades Park, Ridgefield, Fairview, and North Bergen (Hudson County).

North of the Study Area

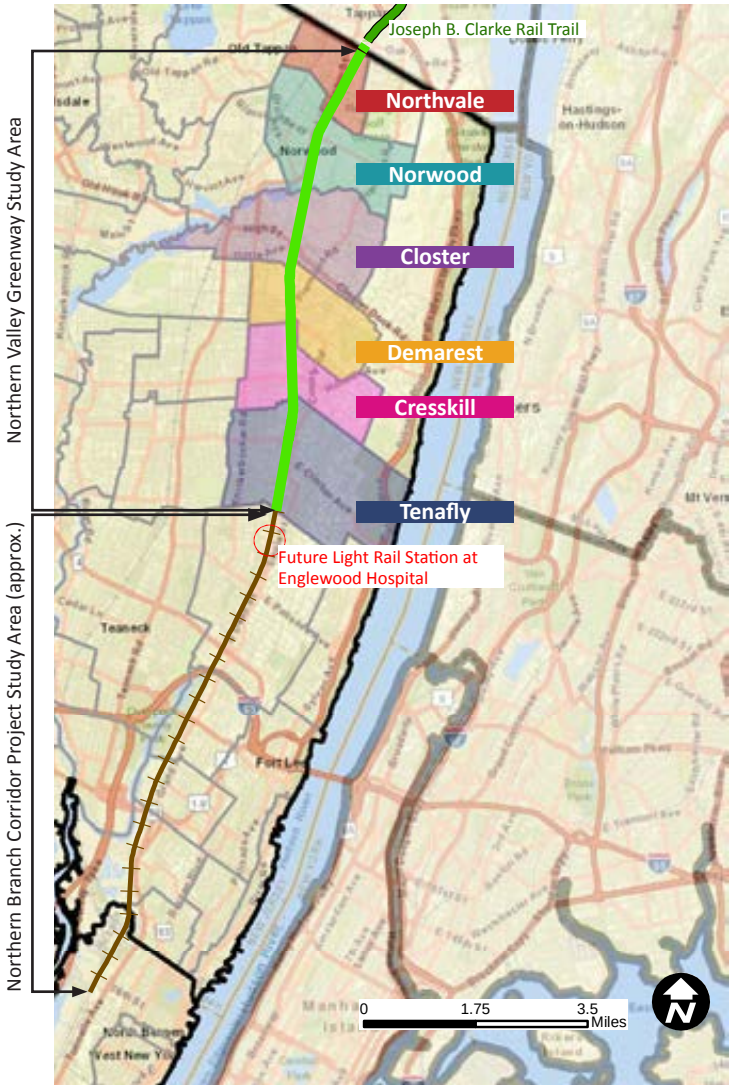
North of the study area in Orangetown, New York (Rockland County), the former railroad right-of-way has been converted to a bicycle and pedestrian shared use path named the Joseph B. Clarke Rail Trail. There is a gap of approximately 1,000 feet between the southern extent of the Clarke Trail (at Oak Tree Road) and the New Jersey/New York border.

There is potential for the Northern Valley Greenway to connect to the Clarke Trail; however, that connection will be coordinated and developed through future planning efforts beyond this current study.

South of the Study Area

South of the study area, from the southern border of Tenafly to North Bergen, the Northern Branch Corridor has been studied extensively over the past 20 years. NJ TRANSIT is planning an extension of the

Map 2.1. Northern Valley Greenway Study Area



Hudson-Bergen Light Rail from the existing light rail terminus (near Tonnelle Avenue Station in North Bergen) north to a proposed terminal station adjacent to Englewood Hospital and Medical Center. The proposed extension of the light rail into Englewood is described in detail on the Northern Branch Corridor Project website: http://www.northernbranchcorridor.com.

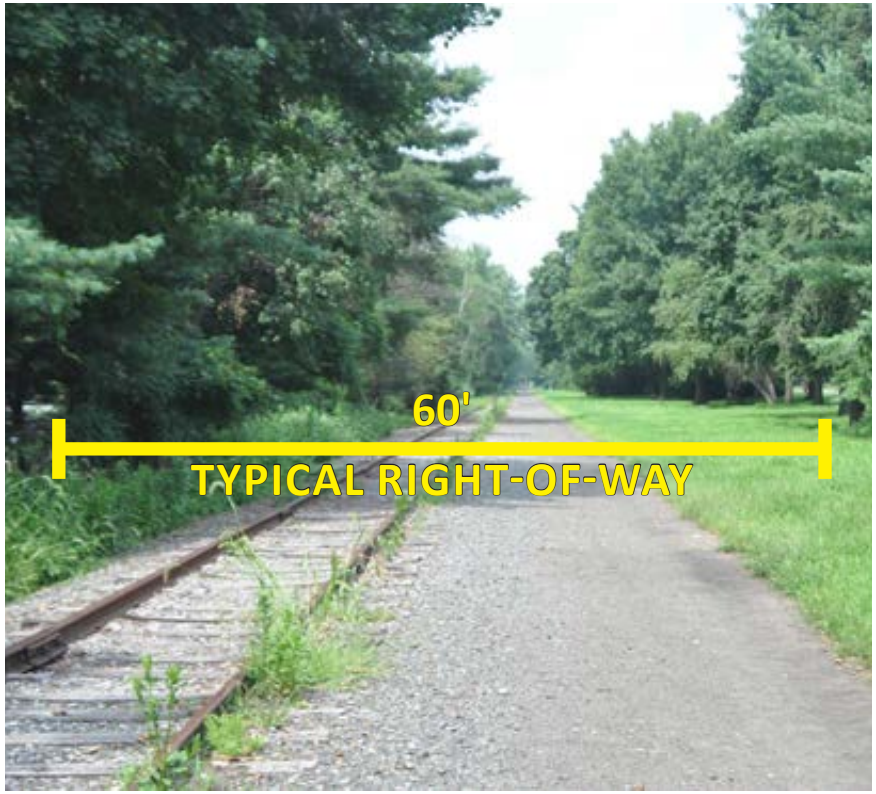
As of March 2017, the Northern Branch Corridor Project has a Supplemental Draft Environmental Impact Statement (SDEIS) in review by the Environmental Protection Agency. The SDEIS amends the original Draft Environmental Impact Statement (DEIS) that was published in 2011 and planned either an electric light rail or diesel multiple unit locomotive to serve the corridor as far north as the Tenafly/Cresskill border. According to the SDEIS Executive Summary, "Opposition to the project in Tenafly and the desire to serve the Englewood Hospital and Medical Center resulted in the development of a single Build Alternative for further analysis – light rail service between Tonnelle Avenue in North Bergen and the Englewood Hospital and Medical Center."

The DEIS and SDEIS were prepared by NJ TRANSIT in cooperation with the Federal Transit Authority as required for project development in accordance with the National Environmental Policy Act (NEPA). Design of the planned light rail facilities and stations will not commence until the completion of the NEPA process and review. In light of this, the study area for this Northern Valley Greenway study is limited at its southern extent to approximately the Englewood/Tenafly border.

A rational endpoint for the southern extent will have to be determined in the future. The possibility for connection between the Northern Valley Greenway and the proposed light rail terminal station at Englewood Hospital, or possible future greenway facilities in Englewood, can be coordinated and developed through future planning efforts beyond this study.

Typical Right-of-Way

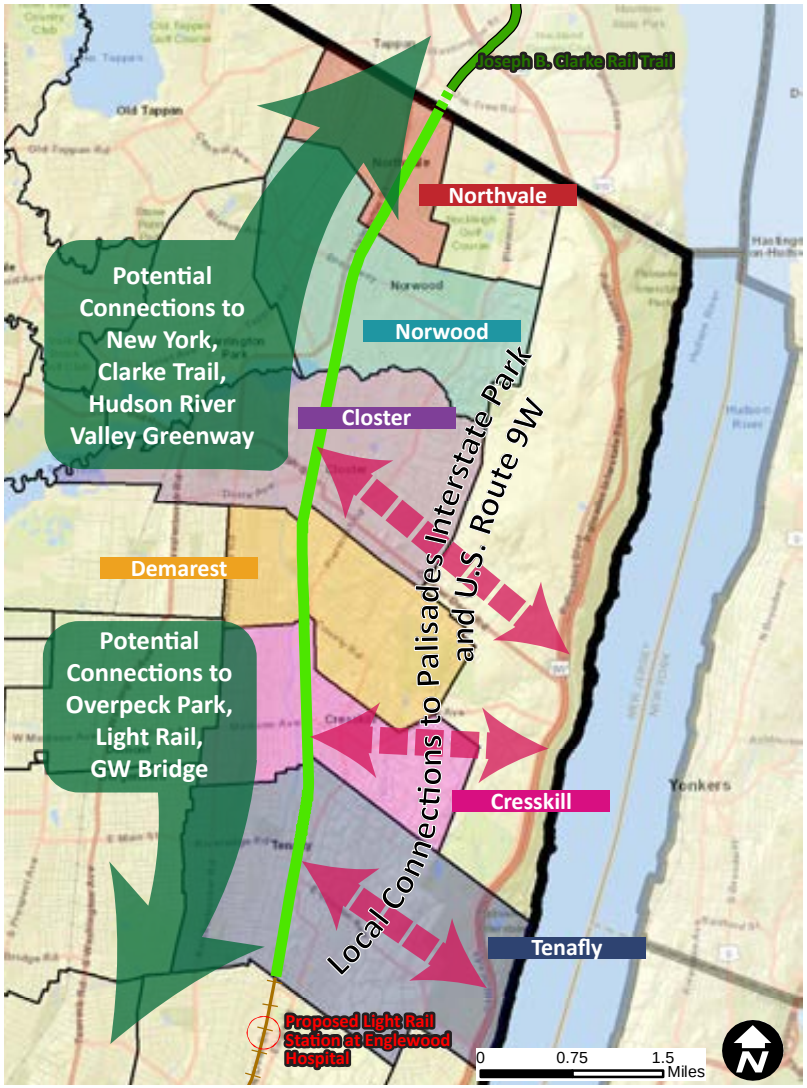
As it traverses the six-borough study area, the Northern Branch Corridor has a typical right-of-way width of approximately 60 feet. The right-of-way narrows to approximately 25-35 feet in Tenafly's main commercial area. In certain areas with environmental considerations (presence of wetlands, floodplain, etc.), the 60-foot width of the right-of-way is likely constrained in terms of permitting and suitability for construction.



2.3 Opportunity for Regional Connectivity

The Northern Valley Greenway has potential to become a major connector for non-motorized transportation in eastern Bergen County. The potential connection to the north and into Rockland County, New York creates opportunity for economic integration and tourism between two states without the use of a car. The potential connection to the south with the future extension of the Hudson-Bergen Light Rail creates the opportunity for a multi-modal, non-automobile commute between Jersey City and the municipalities of the Northern Valley. Future on-road connections between the greenway and Palisades Interstate Park have the potential to support bicycle commuting and create a regional eco-tourism destination.

Map 2.2. Northern Valley Greenway Potential for Regional Connectivity



2.4 Road Crossings Inventory and Assessment

This section provides an inventory and assessment of the road crossings along the potential Northern Valley Greenway corridor. As shown in Map 2.3, there are 17 crossings along the corridor.

Nine of the 17 crossings occur at roadways under local jurisdiction. The other eight occur at roadways that are under the jurisdiction of Bergen County, including:

- Ivy Lane (CR-S68) in Englewood*
- Union Avenue (CR-74) in Cresskill
- Hardenburgh Avenue (CR-80) in Demarest
- Demarest Avenue (CR-41) in Closter
- High Street (CR-502) in Closter
- Closter Dock Road (CR-102) in Closter
- Broadway (CR-106) in Norwood
- Paris Avenue (CR-108) in Northvale

*Note that Ivy Lane is outside of the current study area but is included in this inventory due to its close proximity.

Five of the 17 crossings occur at roadway intersections with traffic signal control, all of which are in the southern portion of the study area. These include:

- Ivy Lane (CR-S68) in Englewood
- Clinton Avenue in Tenafly
- Washington Street/Hillside Avenue in Tenafly
- Madison Avenue in Cresskill
- Union Avenue (CR-74) in Cresskill

One of the crossings is a Pedestrian Access Route (PAR) that provides access from Morningside Avenue (a cul-de-sac on the east side of the right-of-way) to Cresskill High School (on the west side of the right-of-way).

Beginning on the next page, each of the crossings is assessed in terms of general pavement conditions, visibility on approach from the right-of-way, immediate and adjacent traffic controls and crossing signals, speed limit, traffic volume (as available), and ADA considerations.

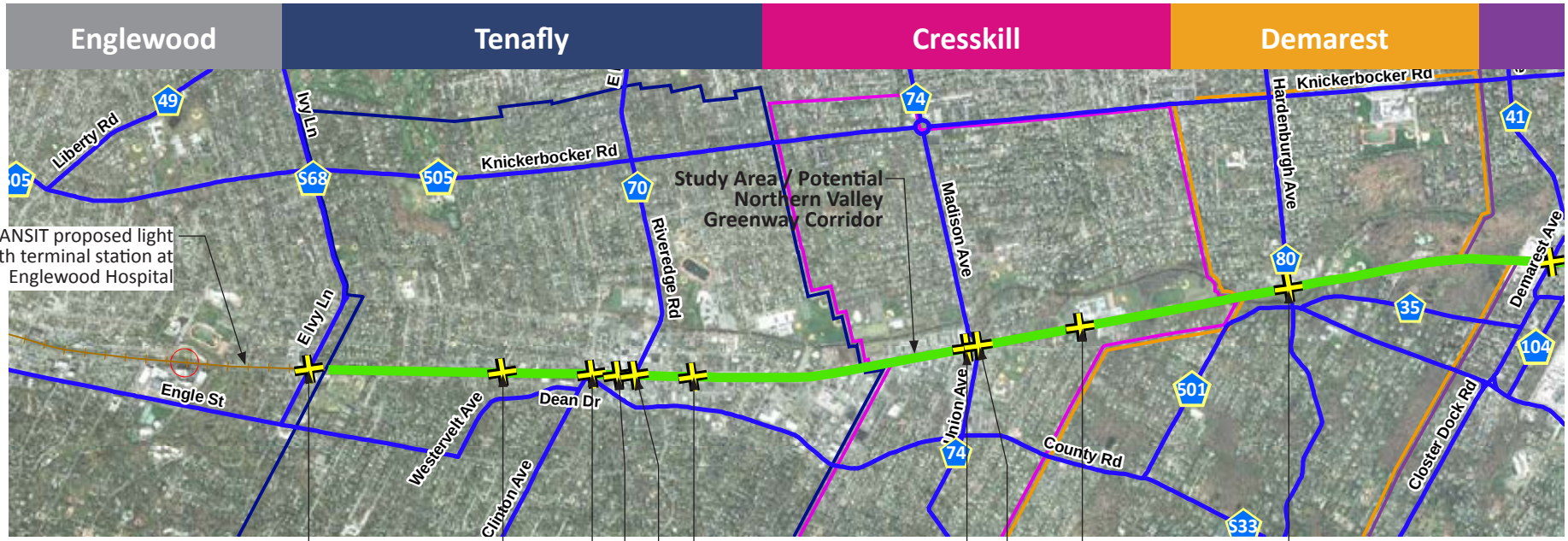
In general, there are opportunities to integrate roadway crossing movements by greenway users into existing traffic signal timing; install user-actuated devices such as HAWK signals or Rectangular Rapid-Flashing Beacons (RRFBs); or incorporate appropriately signed and striped crossing treatments without signalization. Input from the Northern Valley Greenway Committee and from stakeholders also indicates a desire to incorporate mid-block access to the greenway at certain locations, which can be included in the general formulation of crossing treatments.

It is important to note that there is an Orthodox Jewish community to be included in the design and use of the potential greenway. Measures should be taken to ensure that traffic and/or access control devices installed along the greenway are compatible with use on the Sabbath.

ADA access should be provided at all access points to the greenway, including where crossings create an access point. At a majority of the crossings, and as a general approach, this will entail extending sidewalks perpendicular to the greenway direction of travel along roadways, and providing crosswalks and curb ramps as necessary.

As the long-term design for the greenway develops, coordination will be required among the six boroughs in the study area and Bergen County to ensure that the future crossing treatments employed along the greenway maintain a consistent approach to signing, striping, safety measures, signal actuation, and other considerations to the best extent possible. This is one of the areas where the NVG Committee can work on its core mission of coordinating among municipal, county, state, and other agencies.

Map 2.3. Road Crossings Inventory



1 Ivy Lane (CR-S68)*

2 Westervelt Avenue

3 Clinton Avenue

4 Washington Street/Hillside Avenue

5 Jay Street/Riveredge Road

6 Central Avenue

7 Madison Avenue

8 Union Avenue (CR-74)

9 Morningside Avenue Pedestrian Access Route (PAR) to Cresskill High School

10 Hardenburgh Avenue (CR-80)

Key

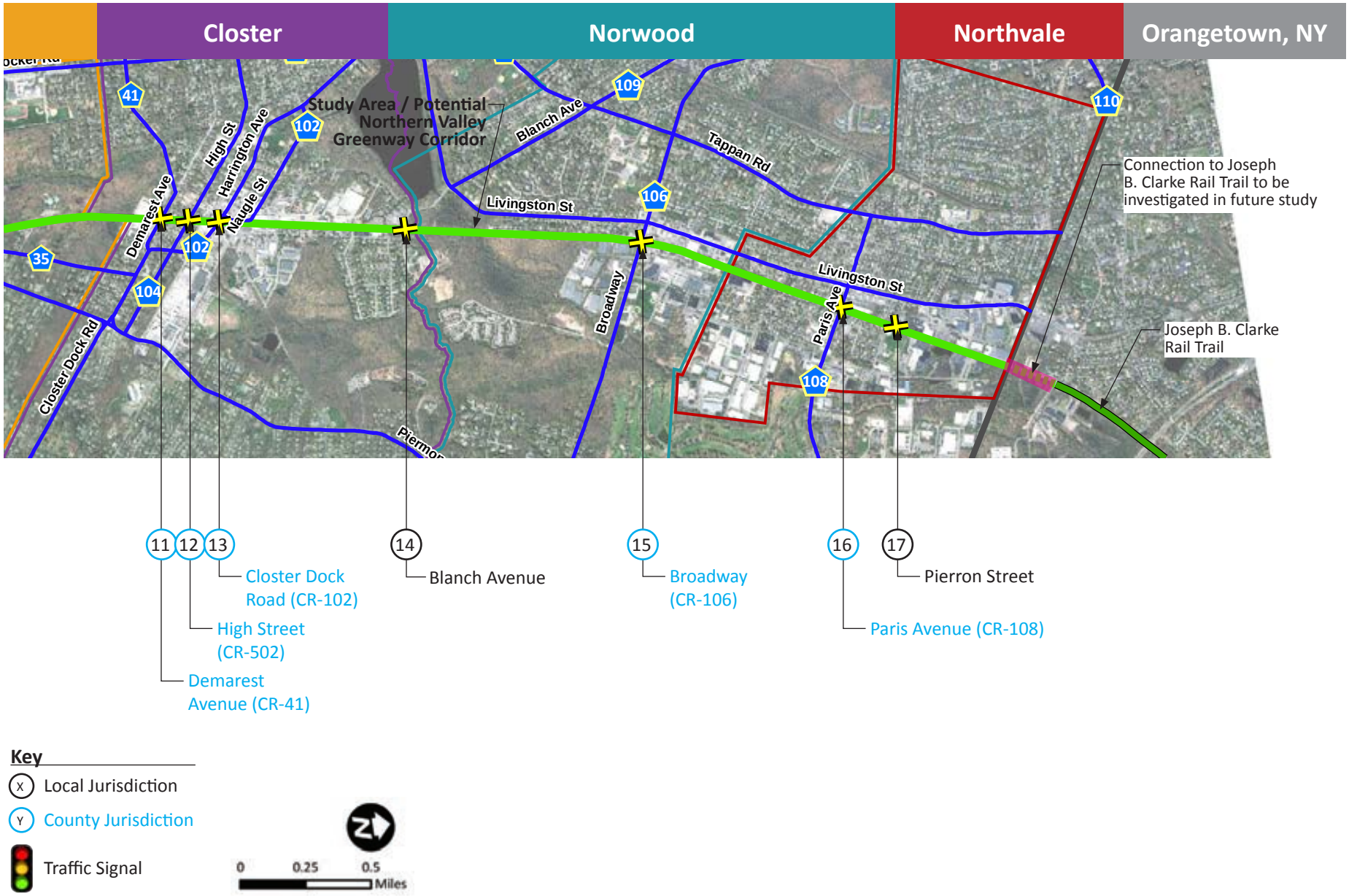
(X) Local Jurisdiction

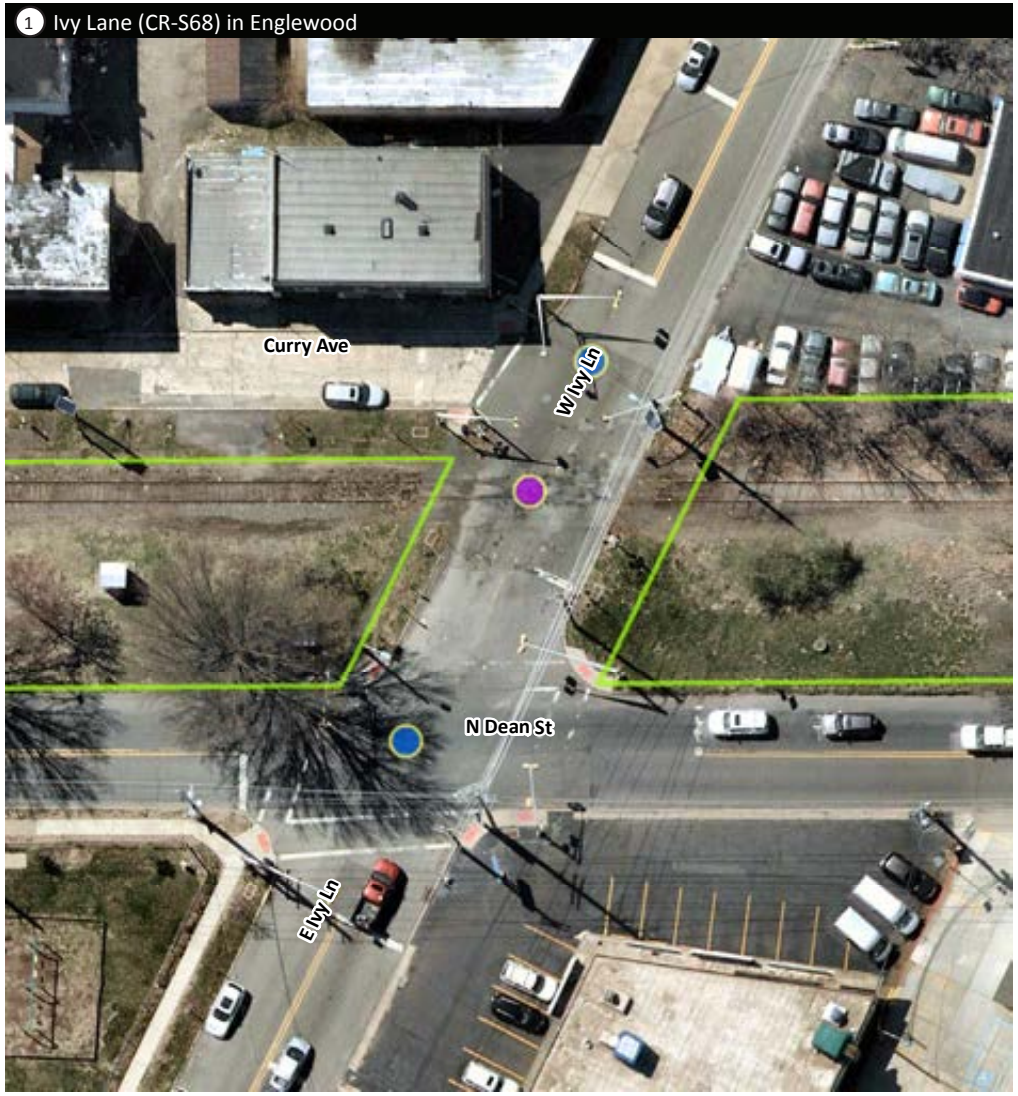
(Y) County Jurisdiction

Traffic Signal

0 0.25 0.5 Miles

*Note that Ivy Lane is outside of the current study area but is included in this inventory due to its close proximity.


Closter
Norwood
Northvale
Orangetown, NY
Study Area / Potential Northern Valley Greenway Corridor
Connection to Joseph B. Clarke Rail Trail to be investigated in future study
Joseph B. Clarke Rail Trail
Livingston St
Livingston St
Tappan Rd
Blanch Ave
Broadway
Paris Ave
Demarest Ave
High St
Harrington Ave
Naugle St
Closter Dock Rd
41
102
102
104
35
106
109
110
108
11
12
13
14
15
16
17
Closter Dock Road (CR-102)
High Street (CR-502)
Demarest Avenue (CR-41)
Blanch Avenue
Broadway (CR-106)
Paris Avenue (CR-108)
Pierron Street
Key
X Local Jurisdiction
Y County Jurisdiction
Traffic Signal
0
0.25
0.5
Miles



Location	Englewood
Jurisdiction	County
Number of Lanes	2
On-Street Parking	None, prohibited within 50' of grade crossing
Stripe or Median	Double yellow centerline
Pavement Cond.	Broken asphalt, rails in place
Site Triangle NW	Obstructed (vegetation)
Site Triangle NE	Unobstructed
Site Triangle SE	Unobstructed
Site Triangle SW	Unobstructed
Traffic Control (TC)	Grade x-ing + traffic signals to east and west
Adj. TC West	50' to Dean St. traffic signal (separate)
Adj. TC East	20' to traffic signal (North end of Curry Ave.)
Grade Crossing Signals	2, post-mounted flashing
Speed Limit	25
Traffic Volume	5264
ADA Considerations North	None
ADA Considerations South	Upgrade asphalt sidewalk with concrete
Notes	Ivy Lane is outside of the current study area but is included in this inventory due to its close proximity.

2 Westervelt Avenue in Tenafly

Northern Branch Corridor Right-of-Way Parcel

0 25 50 Feet

Crashes 2012 - 2016: Property Damage Injury Fatality

Pedestrian crashes marked with P; Bicyclist crashes marked with B

Location	Tenafly
Jurisdiction	Municipal
Number of Lanes	2
On-Street Parking	None, prohibited within 50' of grade crossing
Stripe or Median	None
Pavement Cond.	Patched asphalt, rails in place
Site Triangle NW	Obstructed (vegetation)
Site Triangle NE	Obstructed (vegetation)
Site Triangle SE	Unobstructed
Site Triangle SW	Obstructed (vegetation)
Traffic Control (TC)	Grade x-ing only
Adj. TC West	300' to stop control at Franklin Street
Adj. TC East	150' to stop control at Dean Drive
Grade Crossing Signals	2, post-mounted flashing
Speed Limit	25
Traffic Volume	Not available
ADA Considerations North	Connect to existing sidewalks with concrete
ADA Considerations South	Connect to existing sidewalk to west with concrete
Notes	None

3 Clinton Avenue in Tenafly

Northern Branch Corridor Right-of-Way Parcel

0 25 50 Feet

Crashes 2012 - 2016: Property Damage Injury Fatality

Pedestrian crashes marked with P; Bicyclist crashes marked with B

Location	Tenafly
Jurisdiction	Municipal
Number of Lanes	3
On-Street Parking	None, prohibited within 50' of grade crossing
Stripe or Median	Double yellow centerline
Pavement Cond.	Patched asphalt, rails in place
Site Triangle NW	Unobstructed
Site Triangle NE	Unobstructed
Site Triangle SE	Obstructed (vegetation)
Site Triangle SW	Partially obstructed (vegetation)
Traffic Control (TC)	Grade x-ing + irregular 4-way traffic signal
Adj. TC West	Stop control at W. Railroad Ave. & at Franklin St.
Adj. TC East	Part of Clinton Ave., County Rd., Piermont Rd. signal
Grade Crossing Signals	2, post-mounted flashing
Speed Limit	25
Traffic Volume	Not available
ADA Considerations North	Connect to existing bulb out
ADA Considerations South	Connect to existing sidewalks; Ensure lateral clearance at storm grate
Notes	Right-of-way narrows north of Clinton Ave.

4 Washington Street / Hillside Avenue in Tenafly

Northern Branch Corridor Right-of-Way Parcel

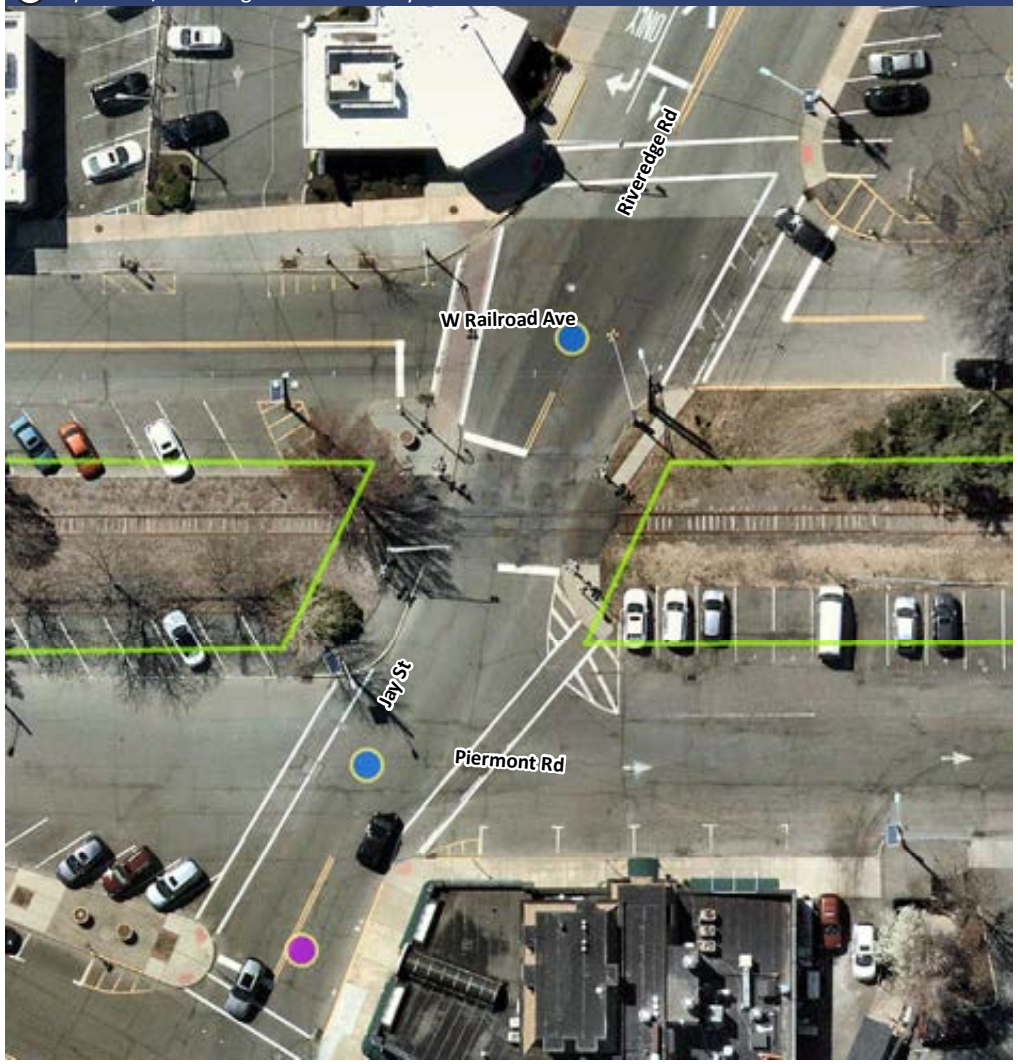
0 25 50 Feet

Crashes 2012 - 2016: Property Damage Injury Fatality

Pedestrian crashes marked with P; Bicyclist crashes marked with B

Location	Tenafly
Jurisdiction	Municipal
Number of Lanes	2
On-Street Parking	None, prohibited within 50' of grade crossing
Stripe or Median	Double yellow centerline
Pavement Cond.	Patched asphalt, rails in place
Site Triangle NW	Unobstructed
Site Triangle NE	Unobstructed
Site Triangle SE	Obstructed (structure)
Site Triangle SW	Unobstructed
Traffic Control (TC)	Grade x-ing + irregular 7-way traffic signal
Adj. TC West	500' to one-way departures at Summit St.
Adj. TC East	300' to traffic signal at Hillside Ave. & County Rd.
Grade Crossing Signals	3, post-mounted flashing
Speed Limit	25
Traffic Volume	Not available
ADA Considerations North	Connect to existing sidewalk/bulb out; Ensure sufficient lateral clearance of post/ planter elements
ADA Considerations South	
Notes	Historic Tenafly Station in southeast quadrant

5 Jay Street / Riveredge Road in Tenafly



Northern Branch Corridor Right-of-Way Parcel

0 25 50 Feet

Crashes 2012 - 2016: Property Damage Injury Fatality

Pedestrian crashes marked with P; Bicyclist crashes marked with B

Location	Tenafly
Jurisdiction	Municipal
Number of Lanes	2
On-Street Parking	None, prohibited within 50' of grade crossing
Stripe or Median	Double yellow centerline
Pavement Cond.	Patched asphalt, rails in place
Site Triangle NW	Partially obstructed (vegetation)
Site Triangle NE	Unobstructed
Site Triangle SE	Unobstructed
Site Triangle SW	Unobstructed
Traffic Control (TC)	Grade x-ing + stop control with overhead flashing beacon
Adj. TC West	Stop control at both legs of W. Railroad Ave.
Adj. TC East	Piermont Rd. one-way departure to north and south
Grade Crossing Signals	4, post-mounted flashing
Speed Limit	25
Traffic Volume	6753
ADA Considerations North	Connect to existing sidewalk; Provide compliant curb ramps
ADA Considerations South	Provide compliant curb ramp to west; Provide concrete sidewalk and compliant curb ramp to east
Notes	None

6 Central Avenue in Tenafly

Northern Branch Corridor Right-of-Way Parcel

0 25 50 Feet

Crashes 2012 - 2016: Property Damage Injury Fatality

Pedestrian crashes marked with P; Bicyclist crashes marked with B

Location	Tenafly
Jurisdiction	Municipal
Number of Lanes	2
On-Street Parking	None, prohibited within 50' of grade crossing
Stripe or Median	Double yellow centerline
Pavement Cond.	New concrete pavement, rails in place
Site Triangle NW	Unobstructed
Site Triangle NE	Obstructed (vegetation)
Site Triangle SE	Unobstructed
Site Triangle SW	Unobstructed
Traffic Control (TC)	Grade x-ing + stop control at 5 of 6 approaches
Adj. TC West	2-way stop control Central Ave. & W. Railroad Ave.
Adj. TC East	4-way stop control Central Ave. & Piermont Rd.
Grade Crossing Signals	4, post-mounted flashing
Speed Limit	25
Traffic Volume	Not available
ADA Considerations North	Connect to existing sidewalk; Consider adding crosswalk at W. Railroad Ave.
ADA Considerations South	Consider pedestrian circulation/access to greenway, existing sidewalks to east and west may be extended
Notes	None

7 Madison Avenue in Cresskill

Northern Branch Corridor Right-of-Way Parcel

0 25 50 Feet

Crashes 2012 - 2016: Property Damage Injury Fatality

Pedestrian crashes marked with P; Bicyclist crashes marked with B

Location	Cresskill
Jurisdiction	Municipal
Number of Lanes	2
On-Street Parking	None, prohibited within 50' of grade crossing
Stripe or Median	Double yellow centerline
Pavement Cond.	Asphalt paved, rails in place
Site Triangle NW	Unobstructed
Site Triangle NE	Partially obstructed (vegetation)
Site Triangle SE	Unobstructed
Site Triangle SW	Partially obstructed (vegetation)
Traffic Control (TC)	Grade x-ing + 4-way traffic signal
Adj. TC West	200' to stop control Union Ave./Cresskill Ave.
Adj. TC East	Signal operations with Piermont Rd.
Grade Crossing Signals	1, post-mounted flashing; 1, cantilever flashing
Speed Limit	25
Traffic Volume	Not available
ADA Considerations North	None
ADA Considerations South	Connect to existing concrete curb ramps
Notes	45 degree bend on approach from west

8 Union Avenue (CR-74) in Cresskill

Northern Branch Corridor Right-of-Way Parcel

0 25 50 Feet

Crashes 2012 - 2016: Property Damage Injury Fatality

Pedestrian crashes marked with P; Bicyclist crashes marked with B

Location	Cresskill
Jurisdiction	County
Number of Lanes	3
On-Street Parking	None, prohibited within 50' of grade crossing
Stripe or Median	Double yellow centerline
Pavement Cond.	Asphalt paved, rails in place
Site Triangle NW	Partially obstructed (vegetation)
Site Triangle NE	Unobstructed
Site Triangle SE	Unobstructed
Site Triangle SW	Unobstructed
Traffic Control (TC)	Grade x-ing + 4-way traffic signal
Adj. TC West	125' to stop control Union Ave./Union Ave.
Adj. TC East	Signal operations with Piermont Rd.
Grade Crossing Signals	2, post-mounted flashing
Speed Limit	25
Traffic Volume	5126
ADA Considerations North	Connect to existing concrete sidewalks
ADA Considerations South	Connect to existing concrete curb ramps; Ensure lateral clearance of posts
Notes	Wide bend on approach from west

9 Morningside Avenue Pedestrian Access Route (PAR) to Cresskill High School

Northern Branch Corridor Right-of-Way Parcel

0 25 50 Feet

Crashes 2012 - 2016: Property Damage Injury Fatality

Pedestrian crashes marked with P; Bicyclist crashes marked with B

Location	Cresskill
Jurisdiction	Municipal
Number of Lanes	Pedestrian path only
On-Street Parking	Morningside Avenue and Cresskill High School lot
Stripe or Median	None
Pavement Cond.	Asphalt paved, rails in place
Site Triangle NW	Partially obstructed (vegetation)
Site Triangle NE	Partially obstructed (vegetation)
Site Triangle SE	Partially obstructed (vegetation)
Site Triangle SW	Partially obstructed (vegetation)
Traffic Control (TC)	Not applicable
Adj. TC West	Morningside Ave. (cul-de-sac) to east
Adj. TC East	Cresskill H.S. access road to west
Grade Crossing Signals	2, post-mounted crossbuck
Speed Limit	Not applicable
Traffic Volume	Not available
ADA Considerations North	Provide curb ramps at PAR approach; Ensure slope is compliant and PAR connects to accessible route
ADA Considerations South	
Notes	None

10 Hardenburgh Avenue (CR-80) in Demarest

Northern Branch Corridor Right-of-Way Parcel

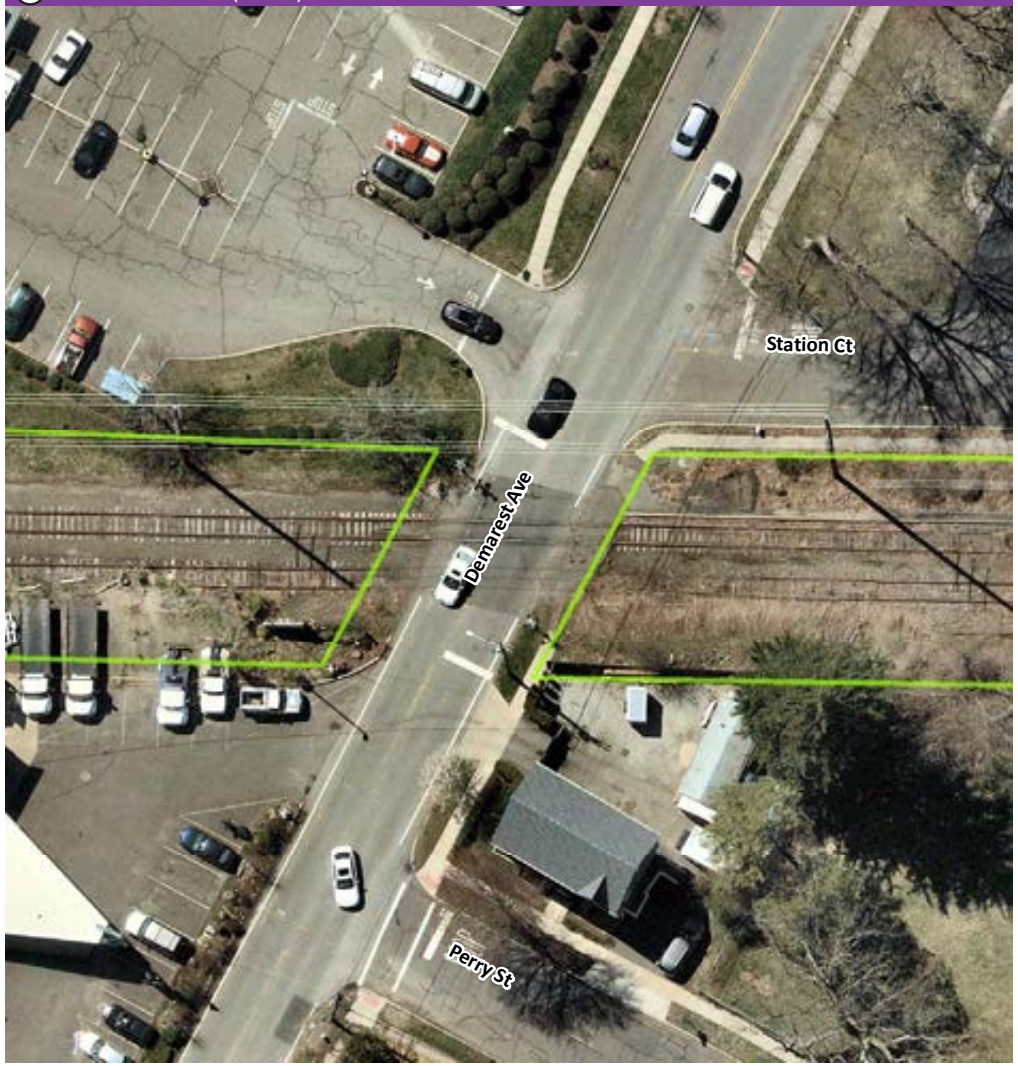
0 25 50 Feet

Crashes 2012 - 2016: Property Damage Injury Fatality

Pedestrian crashes marked with P; Bicyclist crashes marked with B

Location	Demarest
Jurisdiction	County
Number of Lanes	2
On-Street Parking	None, prohibited within 50' of grade crossing
Stripe or Median	Double yellow centerline
Pavement Cond.	Asphalt paved, rails in place
Site Triangle NW	Unobstructed
Site Triangle NE	Partially obstructed (vegetation)
Site Triangle SE	Unobstructed
Site Triangle SW	Partially obstructed (vegetation)
Traffic Control (TC)	Grade x-ing only
Adj. TC West	25' to stop control Park St. and Wakelee Dr.
Adj. TC East	Adjacent stop control drive, 70' to midblock crossing
Grade Crossing Signals	3, post-mounted flashing
Speed Limit	35
Traffic Volume	1420
ADA Considerations North	Connect to existing stamped concrete sidewalk; Provide curb ramp and crosswalk at Wakelee Dr.
ADA Considerations South	Connect to existing stamped concrete sidewalks
Notes	None

11 Demarest Avenue (CR-41) in Closter



Northern Branch Corridor Right-of-Way Parcel

0 25 50 Feet

Crashes 2012 - 2016: Property Damage Injury Fatality

Pedestrian crashes marked with P; Bicyclist crashes marked with B

Location	Closter
Jurisdiction	County
Number of Lanes	2
On-Street Parking	None, prohibited within 50' of grade crossing
Stripe or Median	Double yellow centerline
Pavement Cond.	Asphalt paved, rails in place
Site Triangle NW	Unobstructed
Site Triangle NE	Obstructed (residential fence, structure)
Site Triangle SE	Obstructed (vegetation)
Site Triangle SW	Partially obstructed (vegetation)
Traffic Control (TC)	Grade x-ing only
Adj. TC West	25' to stop control Station Ct. and shopping center egress
Adj. TC East	100' to stop control Perry St.
Grade Crossing Signals	2, post-mounted flashing
Speed Limit	30
Traffic Volume	5937
ADA Considerations North	Connect to sidewalks; Provide curb ramp and crosswalk at Station Ct.
ADA Considerations South	Connect to sidewalk to west; Provide crosswalk at shopping center egress
Notes	None

12 High Street (CR-502) in Closter

Northern Branch Corridor Right-of-Way Parcel

0 25 50 Feet

Crashes 2012 - 2016: Property Damage Injury Fatality

Pedestrian crashes marked with P; Bicyclist crashes marked with B

Location	Closter
Jurisdiction	County
Number of Lanes	2
On-Street Parking	None, prohibited within 50' of grade crossing
Stripe or Median	Double yellow centerline
Pavement Cond.	Patched asphalt, rails in place
Site Triangle NW	Obstructed (vegetation)
Site Triangle NE	Partially obstructed (vegetation)
Site Triangle SE	Obstructed (vegetation + structure)
Site Triangle SW	Obstructed (vegetation)
Traffic Control (TC)	Grade x-ing only
Adj. TC West	350' west to traffic signal Durie Ave.
Adj. TC East	350' east to stop control Perry St. 350' east
Grade Crossing Signals	2, post-mounted flashing
Speed Limit	35
Traffic Volume	14361
ADA Considerations North	Connect to sidewalks; Remove vegetation from sidewalk to east
ADA Considerations South	Connect to sidewalks
Notes	Structure in southeast quadrant associated with railroad

13 Closter Dock Road (CR-102) in Closter

Northern Branch Corridor Right-of-Way Parcel

0 25 50 Feet

Crashes 2012 - 2016: Property Damage Injury Fatality

Pedestrian crashes marked with P; Bicyclist crashes marked with B

Location	Closter
Jurisdiction	County
Number of Lanes	2
On-Street Parking	None, prohibited within 50' of grade crossing
Stripe or Median	Double yellow centerline
Pavement Cond.	Patched asphalt, rails in place
Site Triangle NW	Obstructed (commercial building)
Site Triangle NE	Partially obstructed (vegetation, memorial)
Site Triangle SE	Partially obstructed (commercial building)
Site Triangle SW	Obstructed (commercial building)
Traffic Control (TC)	Grade x-ing only
Adj. TC West	80' to stop control Durie Ave.
Adj. TC East	20' to stop control Herbert Ave.
Grade Crossing Signals	2, post-mounted flashing
Speed Limit	35
Traffic Volume	3618
ADA Considerations North	Connect to existing sidewalks
ADA Considerations South	Connect to existing sidewalks; Provide detectable warning surface at curb ramp at driveway to east
Notes	Structures and ROW within Closter Historic District

14 Blanch Avenue in Closter

Northern Branch Corridor Right-of-Way Parcel

0 25 50 Feet

Crashes 2012 - 2016: Property Damage Injury Fatality

Pedestrian crashes marked with P; Bicyclist crashes marked with B

Location	Closter
Jurisdiction	Municipal
Number of Lanes	2
On-Street Parking	None, prohibited within 50' of grade crossing
Stripe or Median	Double yellow centerline
Pavement Cond.	Broken asphalt, rails in place
Site Triangle NW	Obstructed (vegetation)
Site Triangle NE	Obstructed (vegetation)
Site Triangle SE	Partially obstructed (vegetation)
Site Triangle SW	Partially obstructed (vegetation)
Traffic Control (TC)	Grade x-ing only
Adj. TC West	350' to stop control West St.
Adj. TC East	200' to stop control Blanch Ave.
Grade Crossing Signals	1, post-mounted flashing
Speed Limit	25
Traffic Volume	Not available
ADA Considerations North	None
ADA Considerations South	Connect to existing sidewalk to west; Consider connection to sidewalk to east with crosswalk at Herbert Ave.
Notes	200' east to 90 degree bend on approach from Herbert Ave.

15 Broadway (CR-106) in Norwood

Northern Branch Corridor Right-of-Way Parcel

0 25 50 Feet

Crashes 2012 - 2016: Property Damage Injury Fatality

Pedestrian crashes marked with P; Bicyclist crashes marked with B

Location	Norwood
Jurisdiction	County
Number of Lanes	2
On-Street Parking	None, prohibited within 50' of grade crossing
Stripe or Median	Double yellow centerline
Pavement Cond.	Patched asphalt over red friction, rails in place
Site Triangle NW	Unobstructed
Site Triangle NE	Partially obstructed (commercial building)
Site Triangle SE	Unobstructed
Site Triangle SW	Unobstructed
Traffic Control (TC)	Grade x-ing only
Adj. TC West	20' to stop control W. Railroad Ave.
Adj. TC East	100' to stop control Oak St.
Grade Crossing Signals	2, post-mounted flashing, 1 cantilever flashing
Speed Limit	35
Traffic Volume	8851
ADA Considerations North	Connect to sidewalks; Straighten jog in sidewalk to west
ADA Considerations South	Connect to sidewalk; Provide curb ramp at Railroad Ave.
Notes	None

16 Paris Avenue (CR-108) in Northvale

Northern Branch Corridor Right-of-Way Parcel

0 25 50 Feet

Crashes 2012 - 2016: Property Damage Injury Fatality

Pedestrian crashes marked with P; Bicyclist crashes marked with B

Location	Northvale
Jurisdiction	County
Number of Lanes	2
On-Street Parking	None, prohibited within 50' of grade crossing
Stripe or Median	Double yellow centerline
Pavement Cond.	Asphalt paved, rails in place
Site Triangle NW	Obstructed (vegetation)
Site Triangle NE	Partially obstructed (vegetation)
Site Triangle SE	Obstructed (commercial building)
Site Triangle SW	Partially obstructed (commercial building)
Traffic Control (TC)	Grade x-ing only
Adj. TC West	200' west to stop control Firenze St.
Adj. TC East	250' east to stop control Washington St.
Grade Crossing Signals	2, post-mounted flashing
Speed Limit	30
Traffic Volume	4554
ADA Considerations North	Consider connection to sidewalks 200' west and 250' east
ADA Considerations South	Connect to sidewalks; Provide curb ramp at Railroad Ave.
Notes	None

17 Pierron Street in Northvale

Northern Branch Corridor Right-of-Way Parcel

0 25 50 Feet

Crashes 2012 - 2016: Property Damage Injury Fatality

Pedestrian crashes marked with P; Bicyclist crashes marked with B

Location	Northvale
Jurisdiction	Municipal
Number of Lanes	2
On-Street Parking	None, prohibited within 50' of grade crossing
Stripe or Median	Double yellow centerline east of rail; no centerline west of rail
Pavement Cond.	Asphalt paved, rails in place
Site Triangle NW	Obstructed (vegetation)
Site Triangle NE	Unobstructed
Site Triangle SE	Unobstructed
Site Triangle SW	Obstructed (vegetation)
Traffic Control (TC)	Grade x-ing only
Adj. TC West	550' to Livingston Street
Adj. TC East	50' to 90 degree bend around parking lot
Grade Crossing Signals	1, post-mounted crossbuck
Speed Limit	25
Traffic Volume	3356
ADA Considerations North	Provide ramp connection to John L. Hogan Memorial Park
ADA Considerations South	Connect to existing sidewalk to west with concrete
Notes	None

2.5 Bridges and Culverts

Based on GIS resources available for this study, supplemented by limited field reconnaissance and a review of the 1975 Sanitary Sewer and Storm Drain Map of Tenafly, six bridge structures and six culvert structures have been identified in the proposed Northern Valley Greenway study area. Bridge and culvert locations are indicated on Map 2.4. The bridges and culverts are located within the railroad right-of-way, therefore it is assumed that these structures are owned and maintained by the property owner.

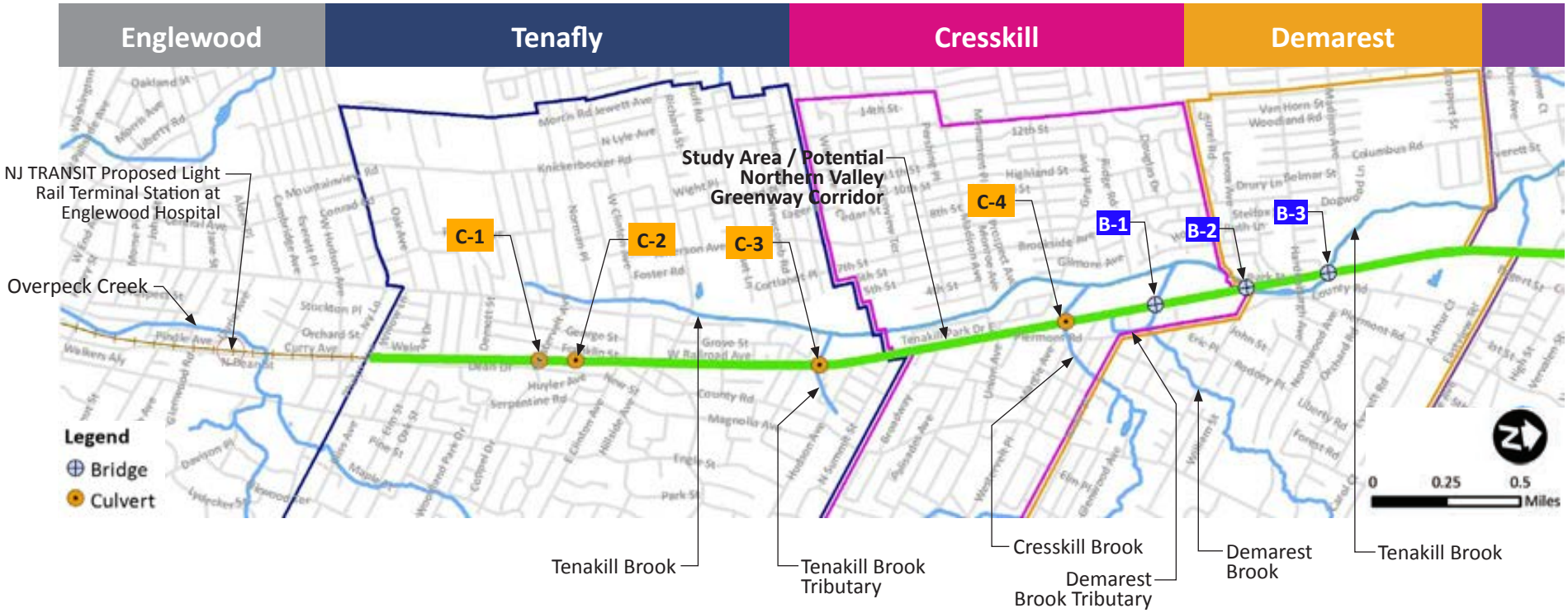
A full inspection of all beams and abutments should be conducted in advance of further design consideration for bridges. Without such an inspection, the following can be said:

- It may be possible to reuse the existing concrete abutments and steel beams and construct a new bridge structures suitable for greenway use.
- If incorporating the existing steel beams, an additional steel beam support may be required if the bridge trestle will be substantially wider (±12' and greater).
- Another option may be install a new prefabricated steel truss bridge using the existing concrete abutments.
- It may also be possible to have two parallel bridges built onto existing abutments, utilizing the existing steel girders for a smaller crossing (pedestrian) and constructing a second, wider bridge for bicycling and running adjacent to the smaller bridge.
- Bridge construction within a flood prone area will have special permitting conditions. For instance, the thickness of the new structure, i.e. concrete deck, will likely be limited to 8" by NJDEP.

Steel girder bridge with concrete abutment spanning the Tenakill Brook in Demarest (identified in Map 2.4 as item B-2).

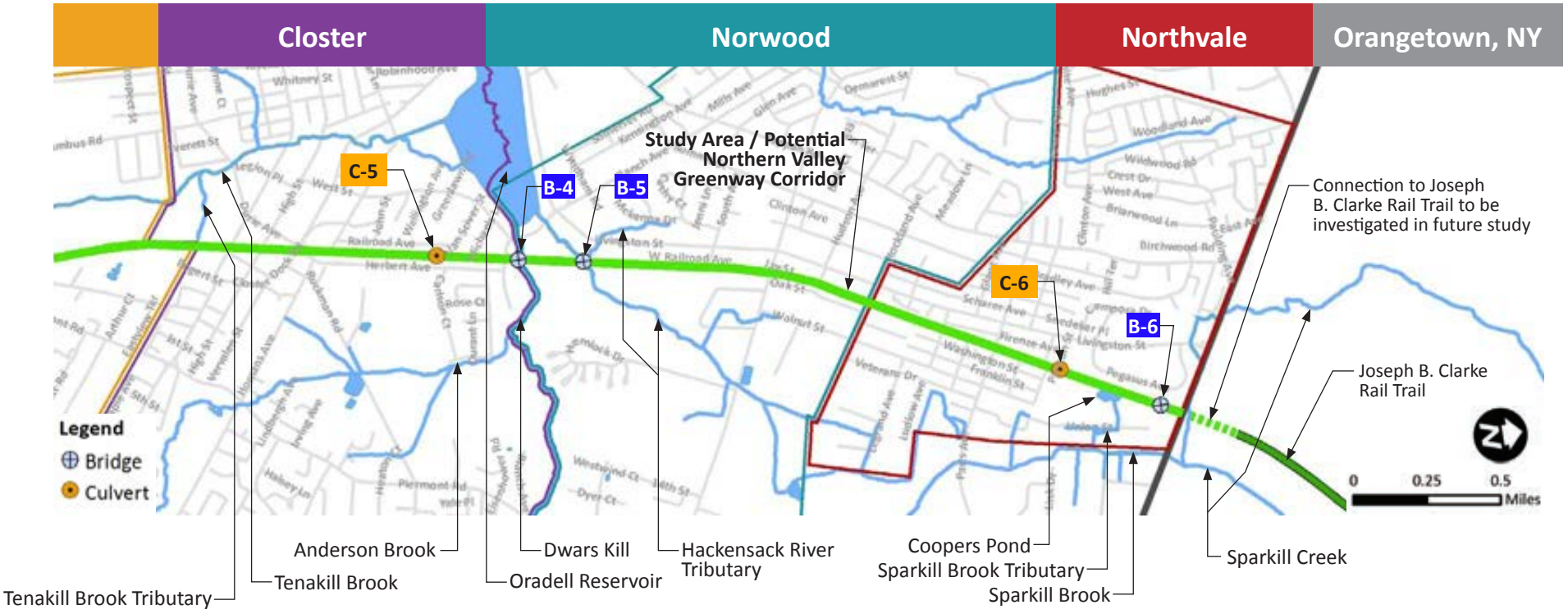
Headwall of culvert at Tenakill Brook Tributary in Tenafly (identified in Map 2.4 as item C-3).

Map 2.4. Bridges and Culverts



Culvert Table (culvert locations shown on Map 2.4, pages 52-53)			
ID	**Location**	**Description**	**Clearance**
C-1	Tenafly	Culvert crossing at Westervelt Avenue	±35'
C-2	Tenafly	Culvert west of 145 Dean Drive (Block 906, Lot 1)	±30'
C-3	Tenafly	Culvert at Tenakill Brook Tributary	±60'
C-4	Cresskill	Box Culvert at Cresskill Brook	±27'
C-5	Closter	Pipe culvert west of 84 Herbert Avenue (Block 1207, Lot 30)	N/A*
C-6	Northvale	Culvert north of Pierron Street	±27'

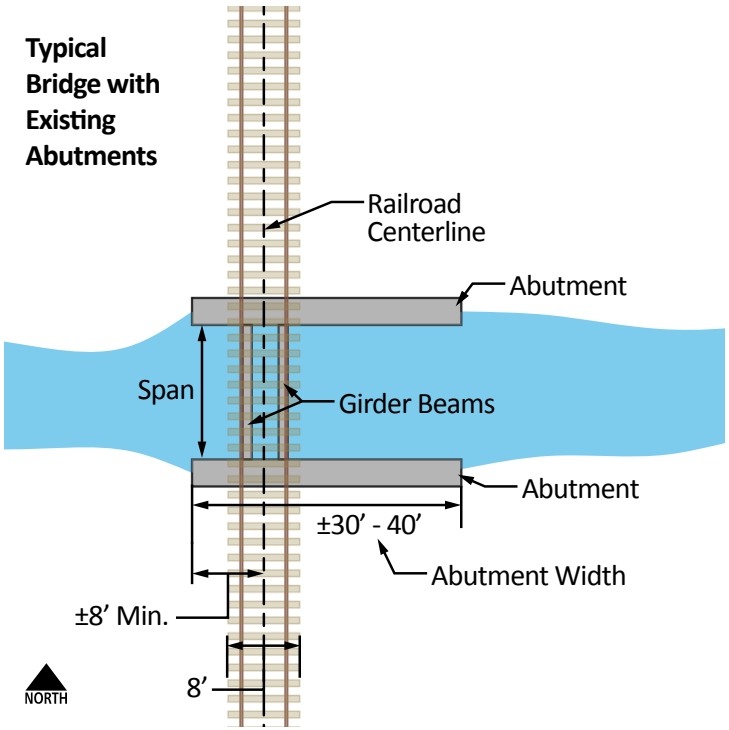
*Note: Pipe culvert is non-structural (no headwalls).

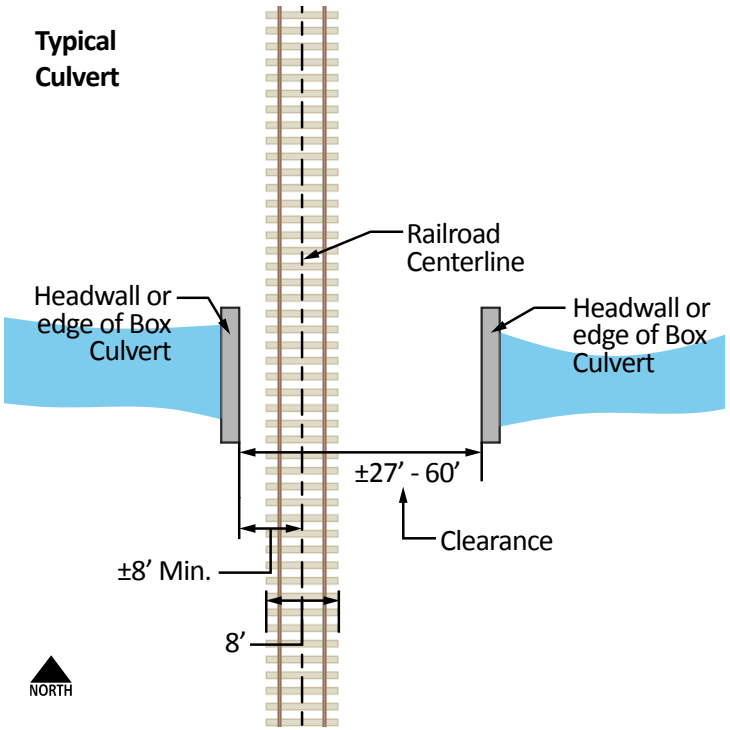


Bridge Table (bridge locations shown on Map 2.4, pages 52-53)				
ID	**Location**	**Description**	**Abutment Width**	**Span**
B-1	Cresskill	Bridge spanning Demarest Brook	±30'	±20'
B-2	Demarest	Bridge spanning Tenakill Brook (South)	±40'	±36'
B-3	Demarest	Bridge spanning Tenakill Brook (North)	±30'	±36'
B-4	Closter/Norwood	Bridge spanning Dwars Kill	±30'	±22'
B-5	Norwood	Bridge spanning Hackensack River Tributary	±36'	±28'
B-6	Northvale	Bridge east of 234 Pegasus Avenue (Block 301, Lot 7)	±34'	±22'

Bridges and Culverts Diagrams

The diagrams on this page illustrate the typical configuration of the bridges and culverts identified within the study area. Approximate key dimensions for each bridge or culvert are provided in the tables associated with Map 2.4. These diagrams illustrate typical existing conditions to aid in the planning of conceptual design solutions for the potential greenway.





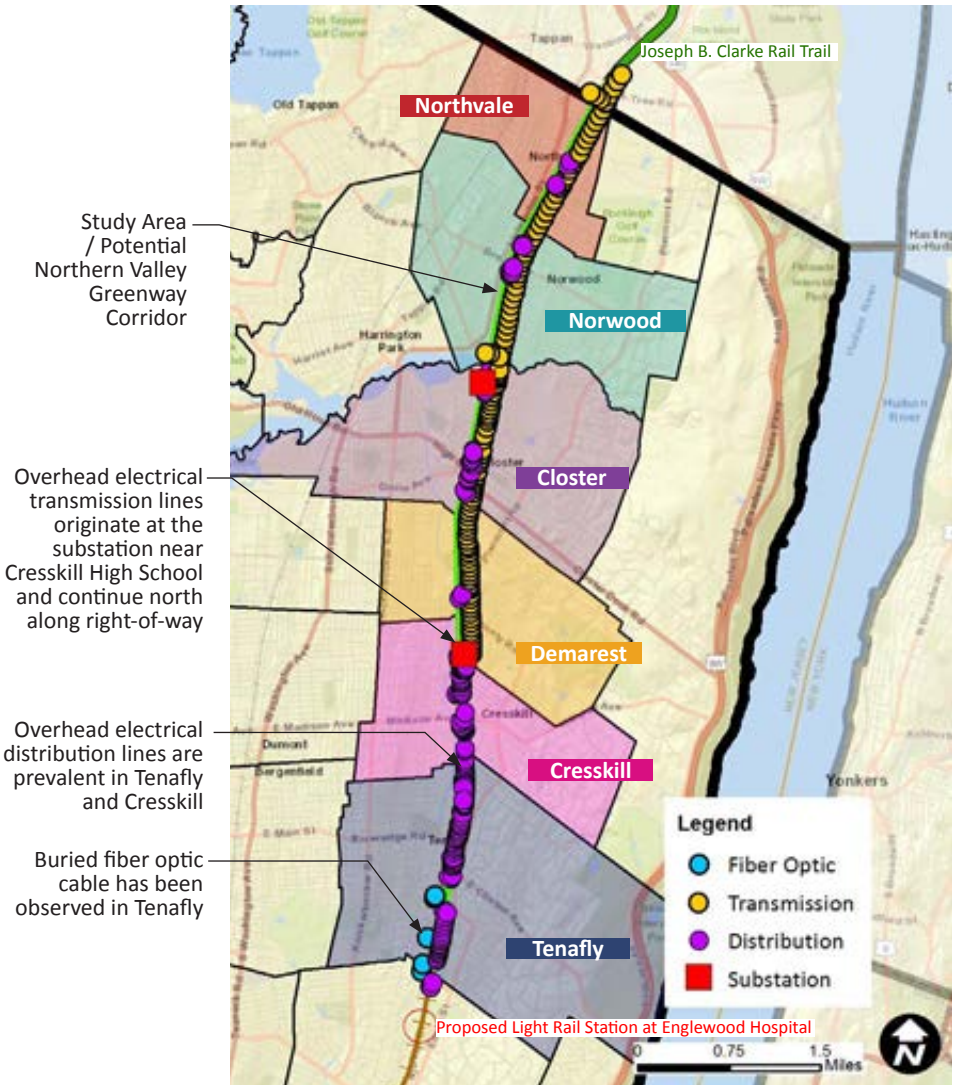
2.6 Utilities

It is common for railroad companies to establish and maintain agreements with utility providers. The linear nature of a railroad corridor is also ideal for the conveyance of various types of utilities. The nature of these agreements vary based on the needs of the participants, but it is not uncommon for a railroad owner to grant easements allowing for utilities underground and in the air.

This study did not include a title search to identify the easements or other agreements that are in place along the Northern Branch Corridor. However, looking at the right-of-way from a physical perspective, it is evident that there are utilities present in the form of overhead electrical transmission lines, overhead electrical distribution lines, and buried fiber optic cable, as shown in Map 2.5. Buried gas and sewer lines are also observed adjacent to the right-of-way in Dean Park in Tenafly. Two electrical substations associated with the transmission lines are located directly adjacent to the study area right-of-way. Examples of these utilities are provided on the next page.

A title search and coordination with the appropriate utilities will be necessary in the future to ensure that the existing utilities and agreements are compatible with the potential design of the Northern Valley Greenway and intentions for property access or acquisition. Utilities owners may be willing to provide as-built record drawings that identify the location of their assets in relation to particular features, such as roadways or parcels.

Map 2.5. Utilities



Utilities Examples

Example of distribution lines within the study area in Tenafly (near Tenakill Swim Club).

Example of a buried fiber optic cable marker in Dean Park in Tenafly.

Example of overhead distribution lines on the east side of the study area right-of-way (view north toward Demarest Station).

Example of overhead distribution lines on the east and west sides of the study area right-of-way (view north from Blanch Avenue in Closter).

2.7 Bus Routes and Stops

The Northern Valley Greenway has the potential to connect to existing bus transit routes that serve the municipalities in the study area. In future design efforts, bus stops can be integrated into trail entrances at appropriate roadway crossings.

The project corridor is served by NJ TRANSIT, Rockland Coaches, and Saddle River Tours on six separate lines that connect:

- **NJ TRANSIT 753:** Cresskill to Paramus
- **NJ TRANSIT 166:** Cresskill/Bergenfield (through Tenafly) to New York City Port Authority Bus Terminal
- **NJ TRANSIT 780:** Englewood Hospital to Passaic Bus Terminal
- **Rockland Coach Route 14**: River Vale (through Closter, Demarest, Cresskill, and Tenafly) to New York City Port Authority Bus Terminal
- **Rockland Coach Route 20:** West Nyack (through Closter, Demarest, Cresskill, and Demarest) to New York City Port Authority Bus Terminal
- **Saddle River Tours 20-84:** Old Tappan (through Northvale, Norwood, Closter, Demarest, Cresskill, and Tenafly) to George Washington Bridge Bus Terminal

Existing bus stops are located in relation to the project corridor at the following locations as keyed to Map 2.6:

❶ Northvale: Bus stop at Paris Ave. (500' west of project corridor) connecting to Rockland 20

❷ Norwood: Bus stop at Broadway (400' west of project corridor) connecting to Rockland 20

❸ Closter: Bus stop at railroad crossing (near Closter Dock Rd.) connecting to Rockland 20

❹ Demarest: Bus shelter on County Rd. near Hardenburgh Ave. connecting to Rockland 14 and 20

Cresskill:

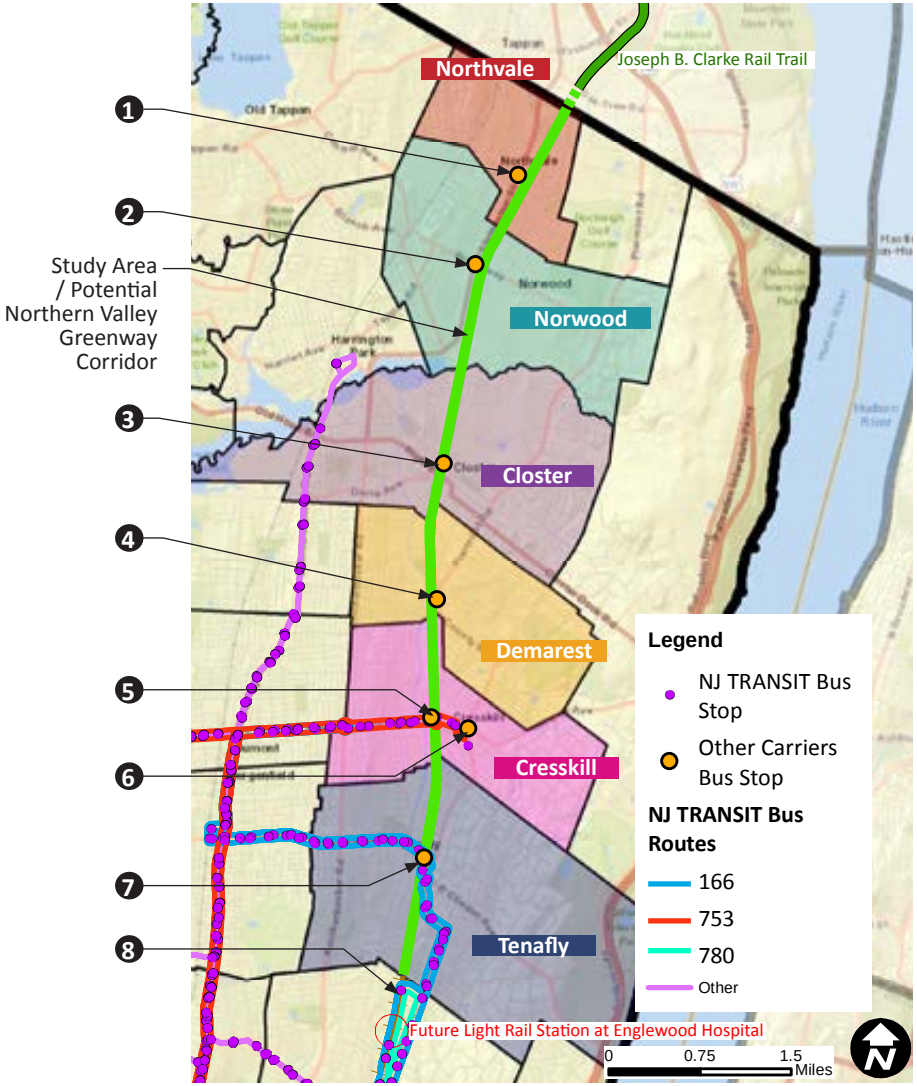
❺ Bus stop at Madison Ave. connecting to NJ TRANSIT 753 and Rockland 14

❻ Bus stop on Union Ave. at municipal complex (750' east of project corridor) connecting to Rockland 20

❼ Tenafly: Bus shelter at Washington St./Hillside Ave. connecting to NJ TRANSIT 166 and Rockland 20

❽ Englewood: Bus stop at N. Dean St. & W. Hudson Ave. (100' south of Ivy Ln.) connecting to NJ TRANSIT 780

Map 2.6. Bus Routes and Stops



2.8 Inventory of Schools and Municipal Points of Interest

Schools and municipal points of interest within walking or biking distance of the potential Northern Valley Greenway can become more accessible to people of all ages and abilities through the construction of the greenway. This section provides an inventory and map of the schools and municipal points of interest in the six boroughs associated with the potential Northern Valley Greenway within a half-mile of the study area. The table also identifies potential on-road connections to access these destinations, which can help to identify future priorities for greenway access points and studies related to traffic, safety, and parking.

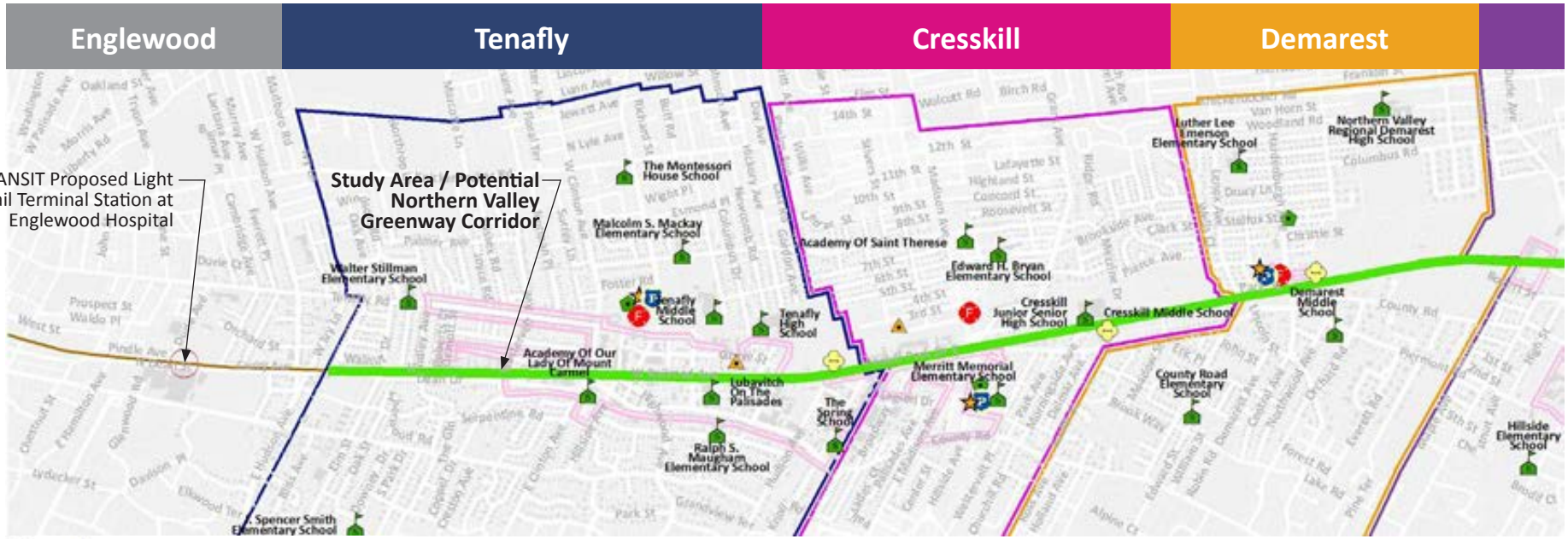
Inventory of Schools and Municipal Assets

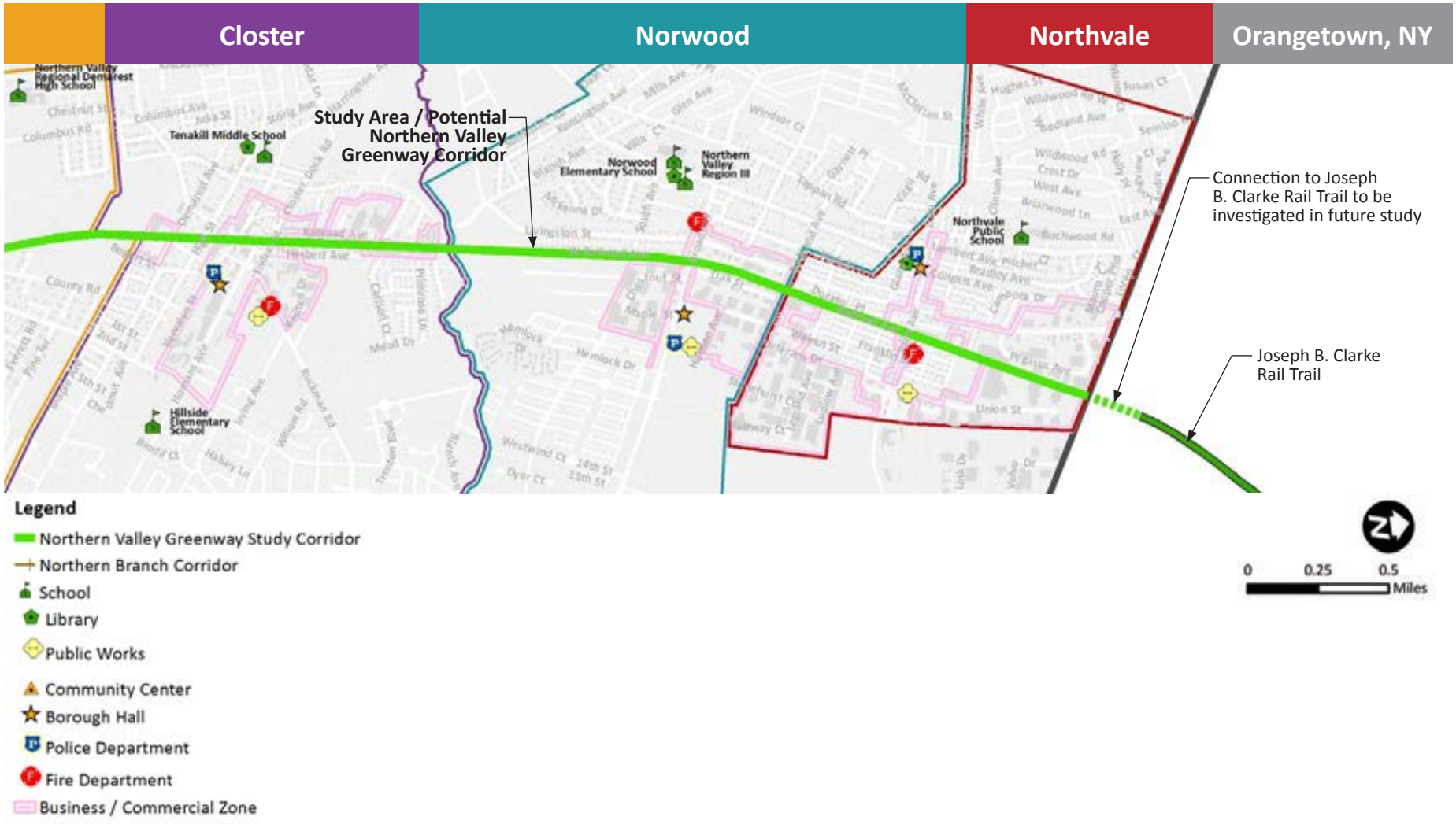
Municipality	School or Municipal Point of Interest	Distance to greenway	Potential Connection
Tenafly	Walter Stillman Elementary School	1,000' west	Leonard Avenue with access through Walnut Park
Tenafly	Academy of Our Lady of Mount Carmen (private school)	150' east	Existing crossings at County Road and Piermont Road
Tenafly	Tenafly Municipal Complex (borough hall, library, police)	1,000' west	W. Clinton Ave., Washington St., or Riveredge Rd.
Tenafly	Tenafly Middle School	800' west	Central Ave.
Tenafly	Malcolm S. Mackay Elementary School	2000' west	Central Ave. to Tenafly Middle School then through middle school yard
Tenafly	Lubavitch on the Palisades (private school)	300' east	Central Ave. to Piermont Rd.
Tenafly	Ralph S. Maugham Elementary School	1000' east	Central Ave. to County Rd.
Tenafly	Korean Community Center	250' west	Consider greenway access at W. Mahan St.
Tenafly	Tenafly High School	850' west	Consider greenway access at former site of Tenafly Swim Club
Tenafly	Tenafly Public Works	Adjacent west	Consider connection or screening
Tenafly	Spring School (Montessori)	1200' east	N. Summit St.

Inventory of Schools and Municipal Assets

Municipality	School or Municipal Point of Interest	Distance to greenway	Potential Connection
Cresskill	Cresskill Community Center	1900' west	Madison Ave. to 3rd St.
Cresskill	Cresskill Community Center (Alternative Access)	500' west	Potential off-road connection if pedestrian bridge constructed near Cresskill Commons
Cresskill	Merritt Memorial Elementary School	1200' east	Union Ave. to Dogwood Ln.
Cresskill	Cresskill municipal complex (borough hall, library, police)	750' east	Union Ave.
Cresskill	Academy of St. Therese (private school)	1700' west	Union Ave.
Cresskill	Edward H. Bryan Elementary School	2300' west	Union Ave. to Brookside Ave.
Cresskill	Cresskill Jr. and Sr. High School	Adjacent west	Direct connection via existing Pedestrian Access Route at Morningside Ave.
Cresskill	Cresskill Public Works	Adjacent east	Consider connection or screening
Demarest	Luther Lee Emerson Elementary School	2800' west	Lenox Ave. to Park St.
Demarest	County Road Elementary School	3100' east	County Rd. to Piermont Rd. to Hardenburgh Ave.
Demarest	Demarest municipal complex (borough hall, police, fire, public works)	100' west	Across Park St.
Demarest	Demarest Free Public Library	1300' west	Hardenburgh Ave.
Demarest	Demarest Middle School	1200' east	Hardenburgh Ave. to Piermont Rd.
Demarest	Northern Valley Regional High School Demarest	5000' west	Hardenburgh Ave. to Columbus Rd.
Closter	Hillside Elementary School	1500' east	High St. to Piermont Rd. to Homans Ave.
Closter	Tenakill Middle School	1900' west	High St.
Closter	Closter Public Library	1900' west	High St.
Norwood	Norwood Elementary School	2700' west	Broadway to Summit St.
Norwood	Norwood Public Library	2300' west	Broadway to Summit St.
Norwood	Northern Valley Region III School	1900' west	Broadway to Summit St.
Norwood	Norwood municipal complex (borough hall, police, court, public works)	1200' east	Broadway
Northvale	Northvale municipal center (borough hall, library, police)	1300' west	Paris Ave.
Northvale	Northvale Public School	3500' west	Paris Ave. to Tappan Rd.

Map 2.7. Inventory of Schools and Municipal Assets




Closter
Norwood
Northvale
Orangetown, NY
Study Area / Potential Northern Valley Greenway Corridor
Connection to Joseph B. Clarke Rail Trail to be investigated in future study
Joseph B. Clarke Rail Trail
Tenakill Middle School
Norwood Elementary School
Northern Valley Region III
Northvale Public School
Hillside Elementary School
Legend
Northern Valley Greenway Study Corridor
Northern Branch Corridor
School
Library
Public Works
Community Center
Borough Hall
Police Department
Fire Department
Business / Commercial Zone
0
0.25
0.5
Miles

2.9 Adjacent Land Use Assessment

An understanding of the land use adjacent to the Northern Valley Greenway study area helps to communicate the immediate context of the corridor and provides insight and direction for design decisions.

For this assessment, NJDEP Land Use/Land Cover data was interpreted on the east and west sides of the project corridor within the following classifications:

- Commercial/Services
- Industrial or Utility
- Residential
- Recreational Land or Open Space
- Forest or Wetland
- Water

The tables on the next page provide a quantitative breakdown of the different land uses adjacent to the study area. Map 2.8 displays this information graphically and, accounting for environmentally sensitive areas, synthesizes an understanding of the typical cross section conditions of the corridor. The typical cross sections are provided on the page following Map 2.8.

Key findings related to the land use directly adjacent to the study area include:

- Land use along the corridor is generally a well-proportioned mix of business uses (42%), open space, forest or wetland (30%) and residential (27%).
- Tenafly, Closter, and Northvale have significant potential for connections to local businesses, with business uses (Commercial/ Services, Industrial, or Utility) accounting for 57%, 67%, and 42% of adjacent land use, respectively. The greenway would create an opportunity for these business zones to connect with related business zones in points south (Englewood and beyond) and points north (Sparkill and Orangeburg, NY).
- Residential land use is a significant consideration along the corridor, accounting for 27% of adjacent land use. Typical residential land uses include detached housing with back yards with fencing and/ or vegetated buffers adjacent to the corridor, or multi-unit housing with parking areas that may be more open to the corridor (such as the Marlborough in Tenafly or Cresskill Commons in Cresskill). Care should be taken to work with local residents and owners to provide appropriate/desirable borders and/or connections to the greenway.
- Demarest and Norwood include the largest concentrations of adjacent forest or wetland, which will be important considerations for future permitting approvals and merit design sensitivity.
- Recreational Land or Open Space and Forest or Wetland account for 13% and 17% of the adjacent land uses, respectively. Care should be taken to balance active and passive recreational uses, capitalizing on existing conditions to guide the development of park elements.

Adjacent Land Use Summary for the Study Area

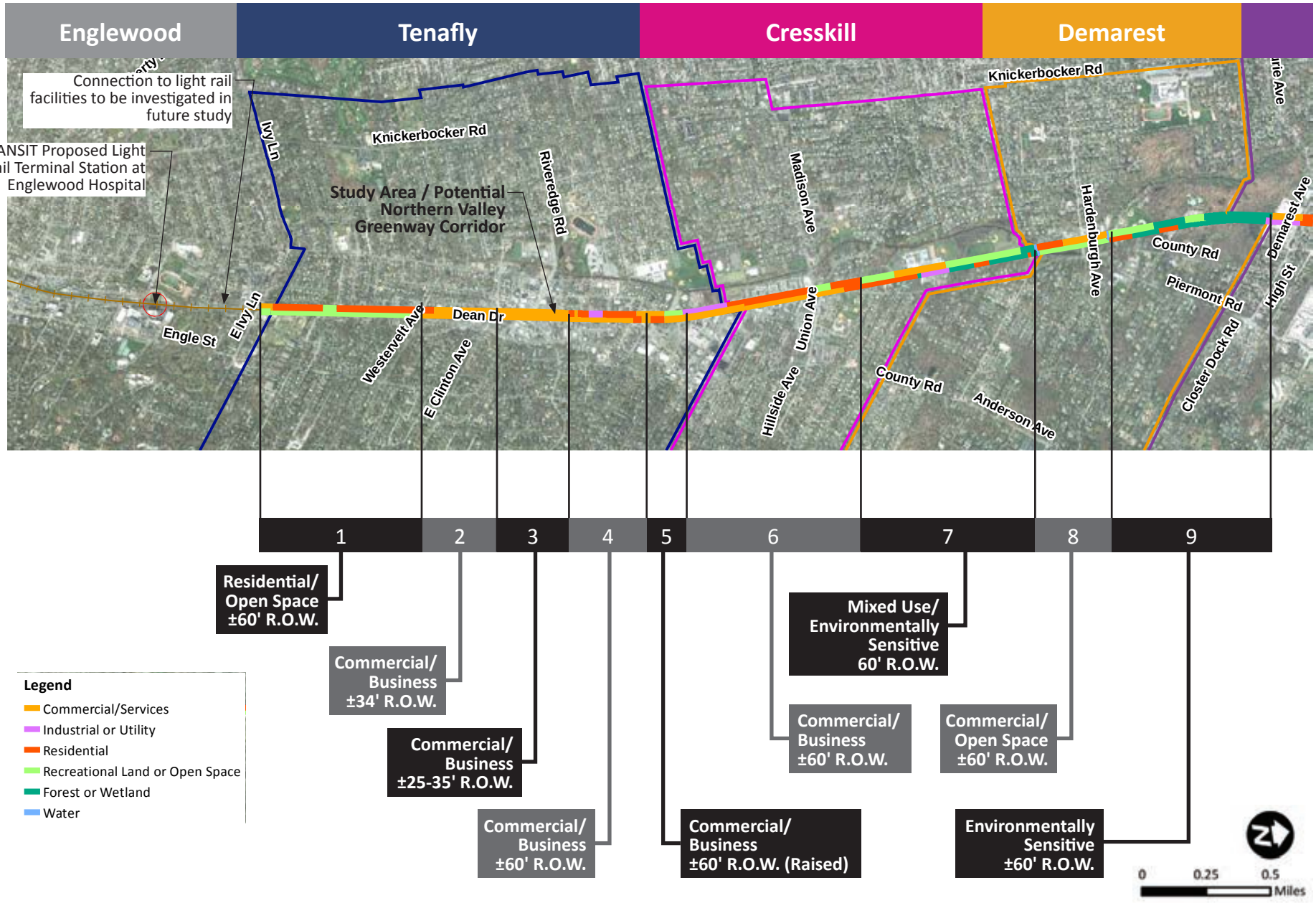
Classification	Total length along corridor (LF)	% Of Total Corridor	Total length along west side of corridor (LF)	% Of West side of corridor	Total Length along east side of corridor (LF)	% Of East side of corridor
Commercial/Services	23,576	30%	11,791	30%	11,785	30%
Industrial or Utility	9,697	12%	4,579	12%	5,117	13%
Residential	20,784	27%	13,151	34%	7,634	20%
Recreational Land or Open Space	9,832	13%	4,662	12%	5,170	13%
Forest or Wetland	13,397	17%	4,643	12%	8,754	22%
Water	616	1%	114	0%	502	1%
Total	77,901		38,939		38,962	

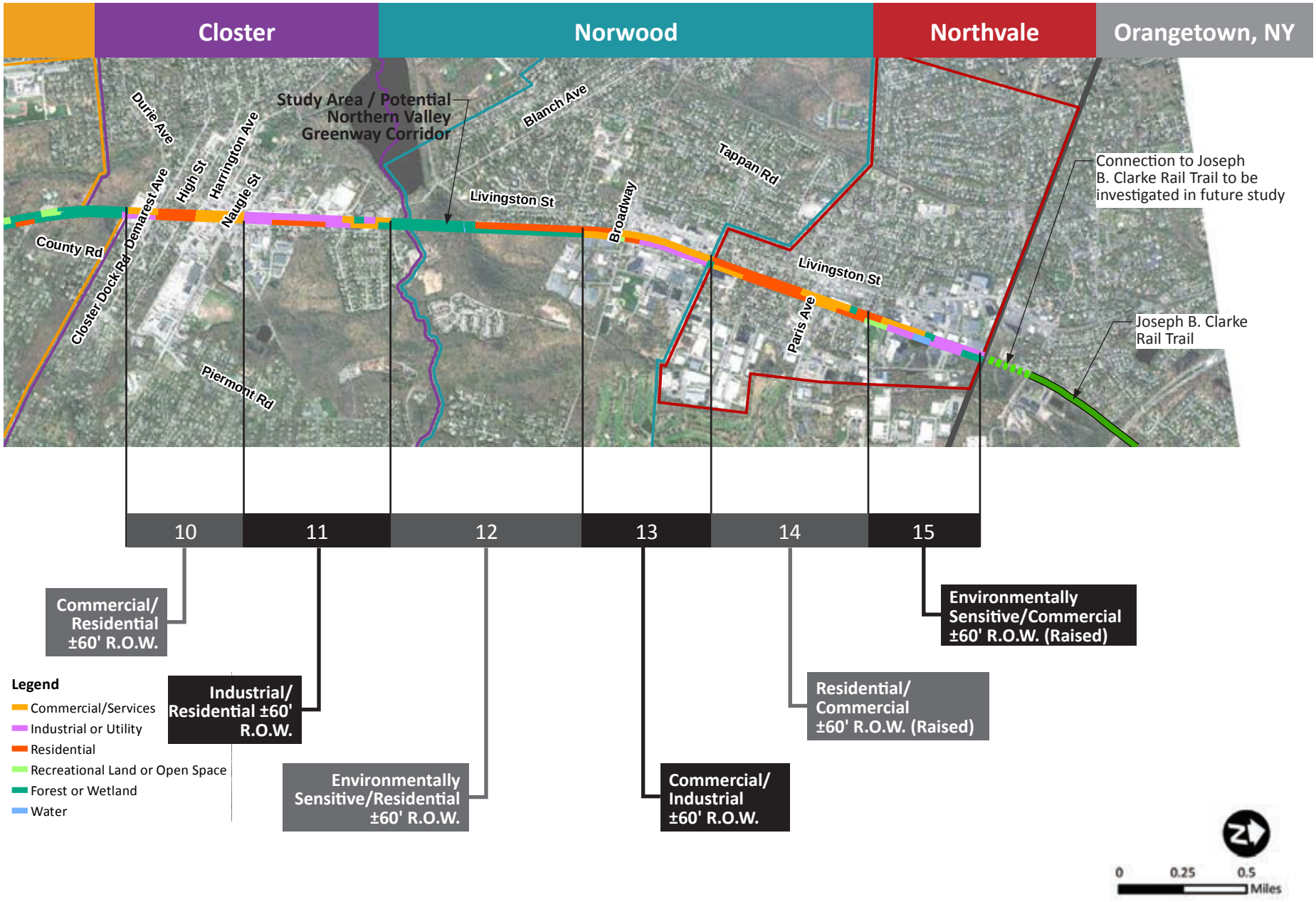
Adjacent Land Use Summary by Municipality

	Tenafly		Cresskill		Demarest		Closter		Norwood		Northvale	
Classification	Length (LF)	%	Length (LF)	%	Length (LF)	%	Length (LF)	%	Length (LF)	%	Length (LF)	%
Commercial/Services	9,677	51%	3,149	25%	925	10%	3,778	30%	2,816	22%	3,229	27%
Industrial or Utility	1,221	6%	583	5%	87	1%	3,979	32%	1,473	12%	2,354	20%
Residential	4,499	23%	4,348	35%	1,422	16%	2,730	22%	3,163	25%	4,622	39%
Recreational Land or Open Space	3,757	20%	2,640	21%	2,766	31%	0	0%	182	1%	487	4%
Forest or Wetland	0	0%	1,827	15%	3,492	39%	2,089	17%	5,091	40%	898	8%
Water	0	0%	0	0%	184	2%	0	0%	60	0%	372	3%
Total	19,153		12,547		8,877		12,578		12,785		11,962	

Notes: (1) LF = linear feet. (2) For the purposes of this assessment, school buildings are generally classified with Commercial/Services and school athletic fields as Recreational Land or Open Space.

Map 2.8. Adjacent Land Use and Right-of-Way Cross Section Analysis




Closter
Norwood
Northvale
Orangetown, NY
Study Area / Potential Northern Valley Greenway Corridor
Durie Ave
High St
Harrington Ave
Naugle St
Demarest Ave
Blanch Ave
Tappan Rd
Livingston St
Broadway
County Rd
Closter Dock Rd
Piermont Rd
Paris Ave
Connection to Joseph B. Clarke Rail Trail to be investigated in future study
Joseph B. Clarke Rail Trail
10
11
12
13
14
15
Commercial/ Residential ±60' R.O.W.
Industrial/ Residential ±60' R.O.W.
Environmentally Sensitive/Residential ±60' R.O.W.
Commercial/ Industrial ±60' R.O.W.
Residential/ Commercial ±60' R.O.W. (Raised)
Environmentally Sensitive/Commercial ±60' R.O.W. (Raised)
Legend
Commercial/Services
Industrial or Utility
Residential
Recreational Land or Open Space
Forest or Wetland
Water
0
0.25
0.5
Miles

2.10 Typical Existing Cross Sections

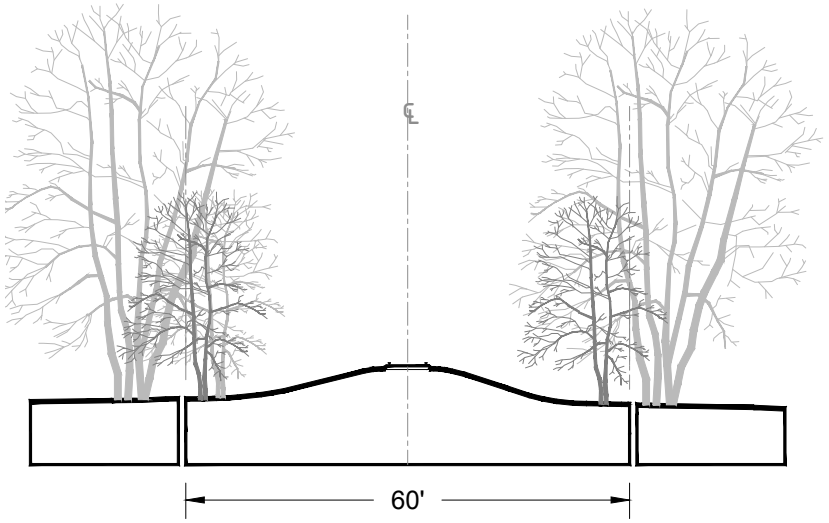
The following Typical Existing Cross Sections have been developed to summarize conditions found along the Northern Valley Greenway study area. The typical cross sections look north and are defined as:

A. Full Width Available - 60': The right-of-way is 60' wide and the track is slightly offset to the west. This cross section is generally optimal for development as a greenway and represents roughly 35% of the corridor.

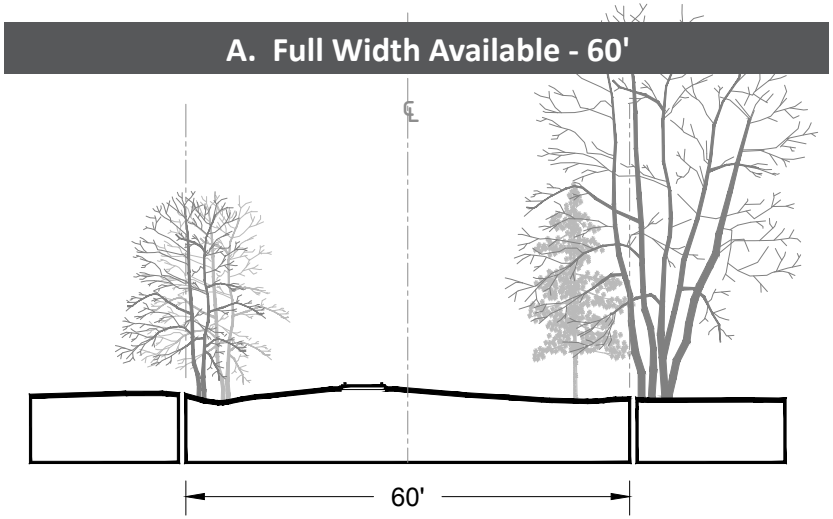
B. Limited Constructible Width - <60': The right-of-way is 60' wide with the track generally located on center. Some constraints, such as wetlands or encroachment, are present. This cross section remains suitable for greenway development, provided environmental impacts are minimized. This cross section represents roughly 58% of the corridor.

C. Limited Width Constrained - 25'-35' Wide: This cross section is constrained in width, but remains viable for greenway development and represents roughly 7% of the corridor.

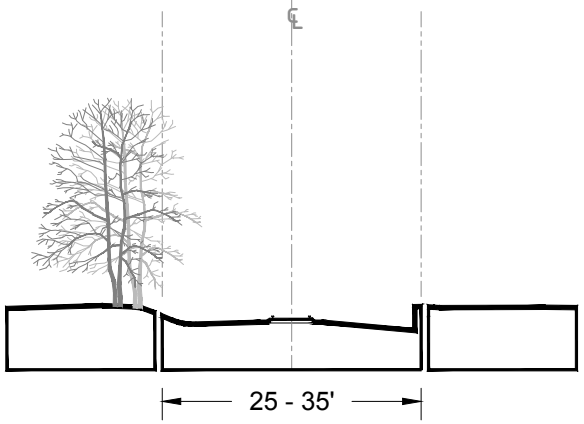
B. Limited Constructible Width - <60'



A. Full Width Available - 60'



C. Limited Width Constrained - 25'-35'



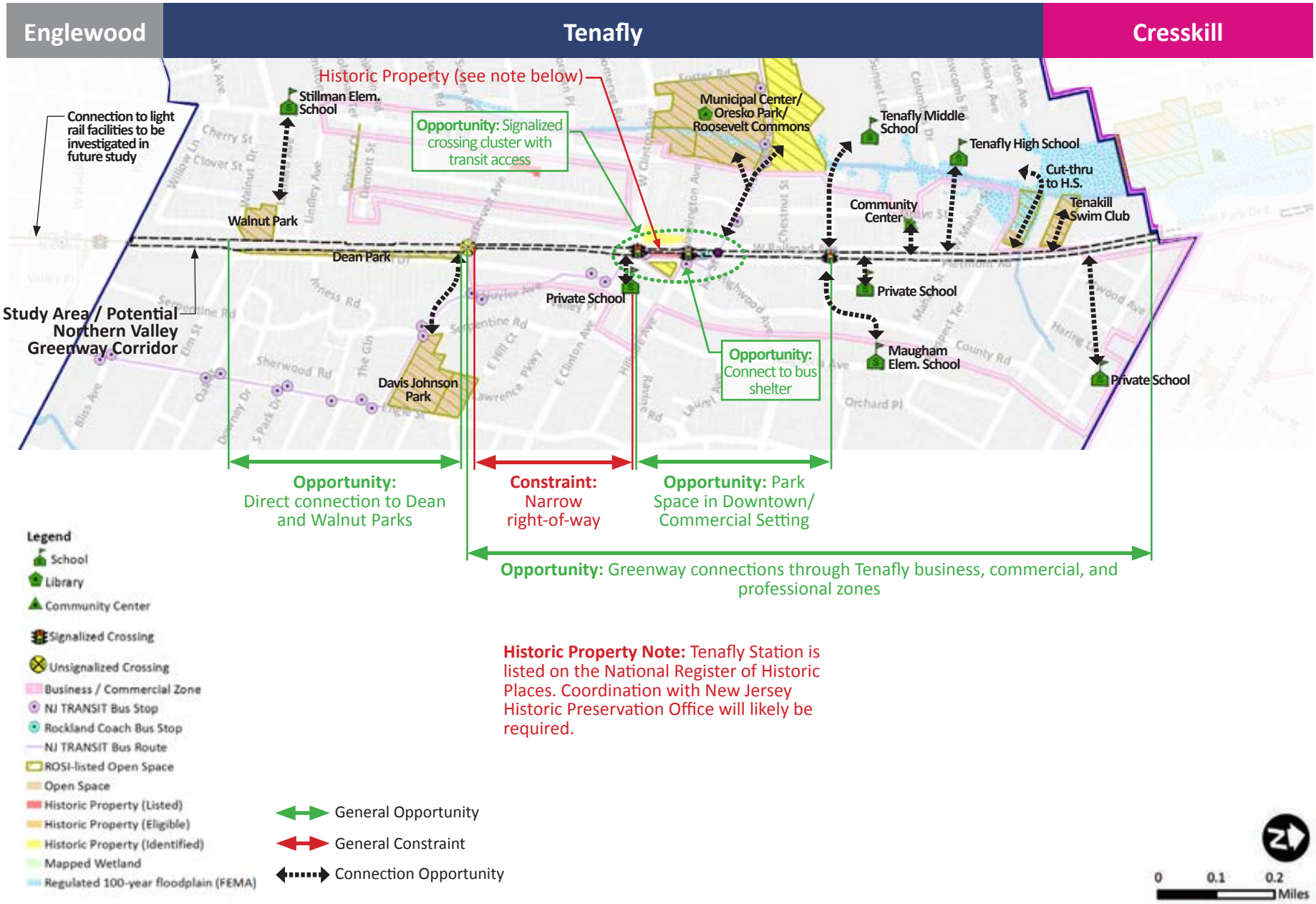
2.11 Opportunities and Constraints Map Series

This section summarizes, at a planning level, the opportunities and constraints associated with the potential Northern Valley Greenway in each of the six municipalities in the study area: Tenafly, Cresskill, Demarest, Closter, Norwood, and Northvale.

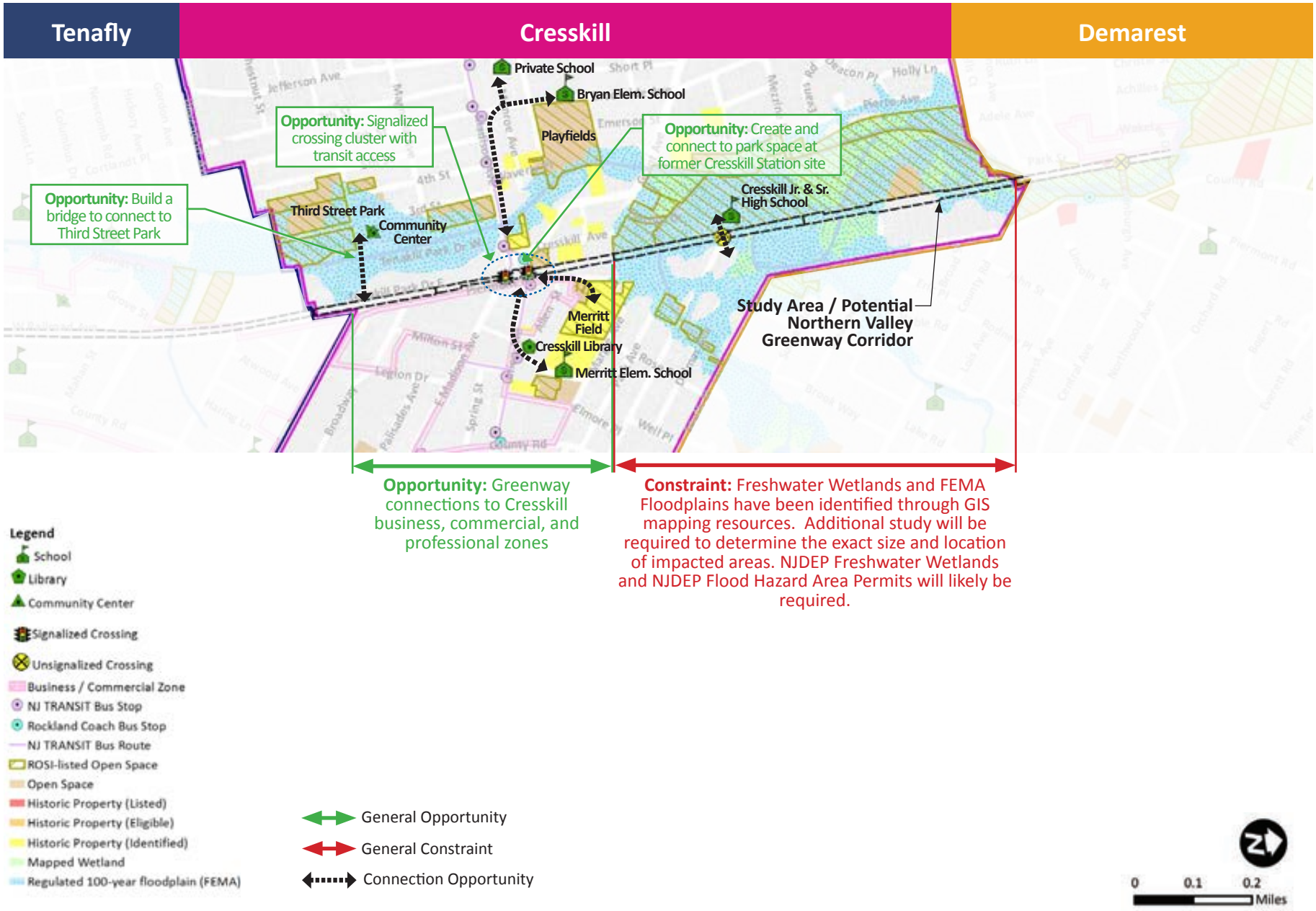
The Opportunities and Constrains Map Series (Maps 9.1 - 9.6), presented on the following pages, is synthesized from findings in the *Chapter 3: Environmental Review*, input from the Northern Valley Greenway Committee, input from stakeholders and the public, and findings recorded in earlier sections of this chapter.

The Opportunities and Constraints Map Series addresses potential access points, roadway crossings, linkages to local destinations, and responds to adjacent structures, natural features, and land use.

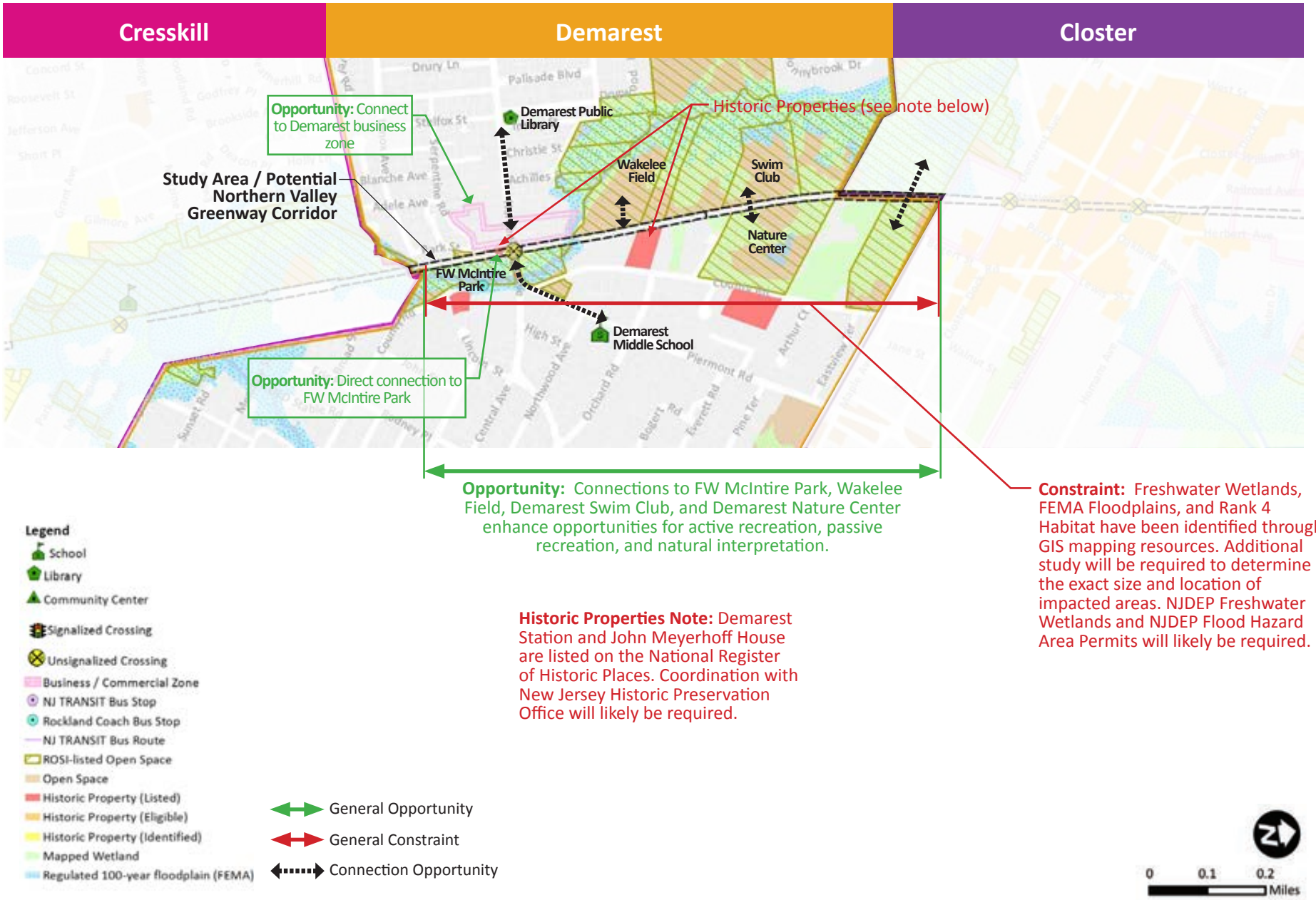
Map 2.9.1. Tenafly Opportunities and Constraints Map



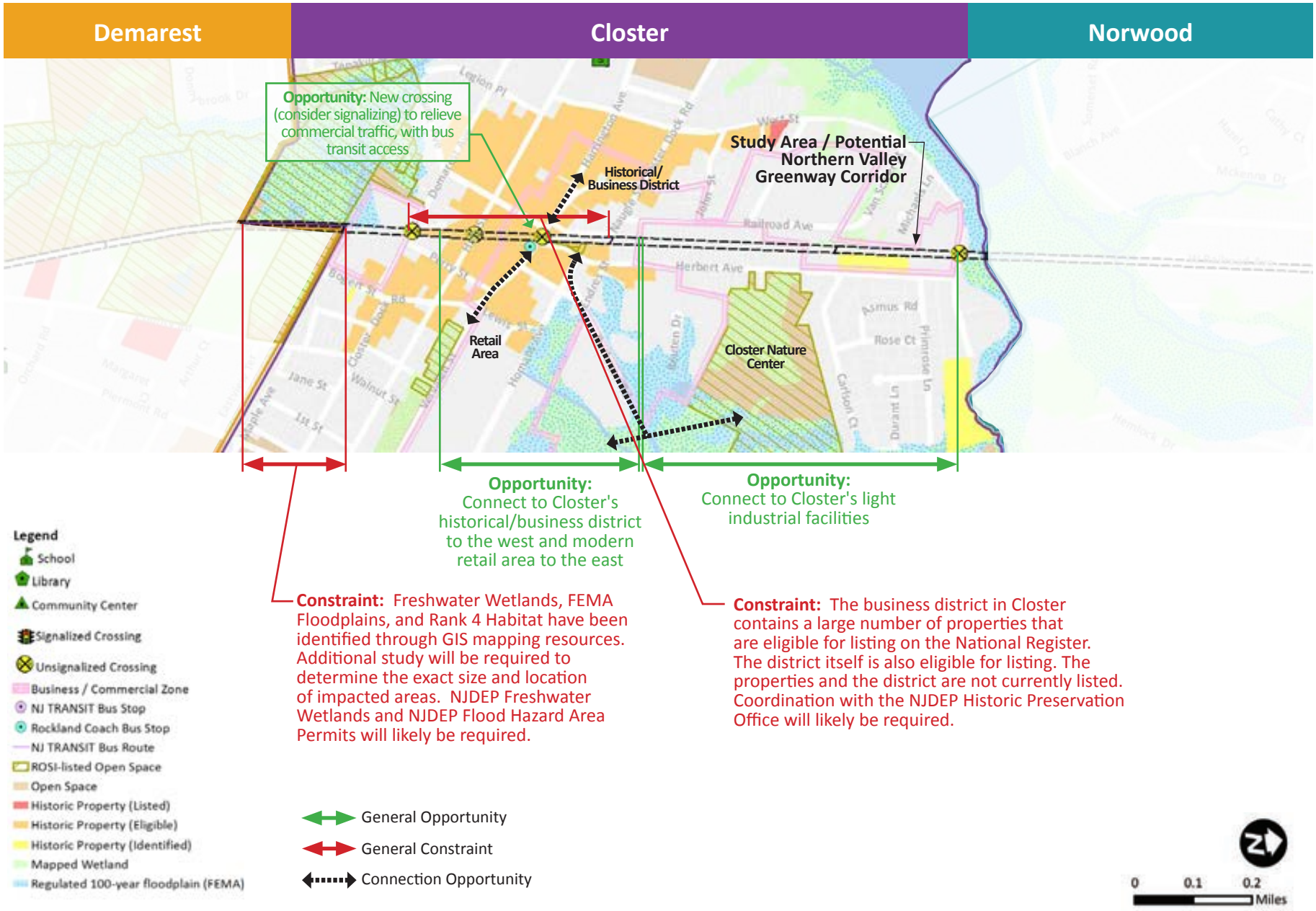
Map 2.9.2. Cresskill Opportunities and Constraints Map



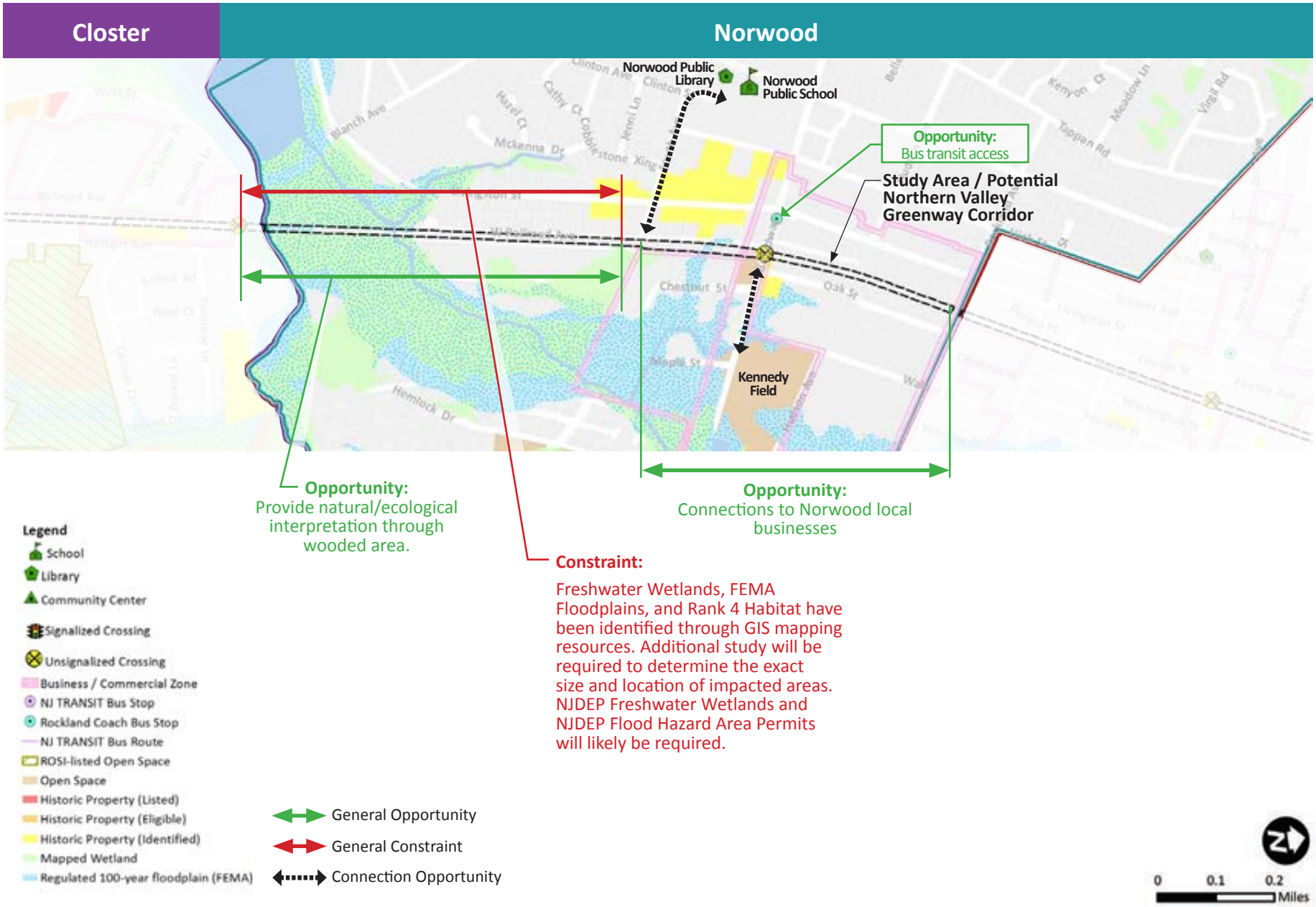
Map 2.9.3. Demarest Opportunities and Constraints Map



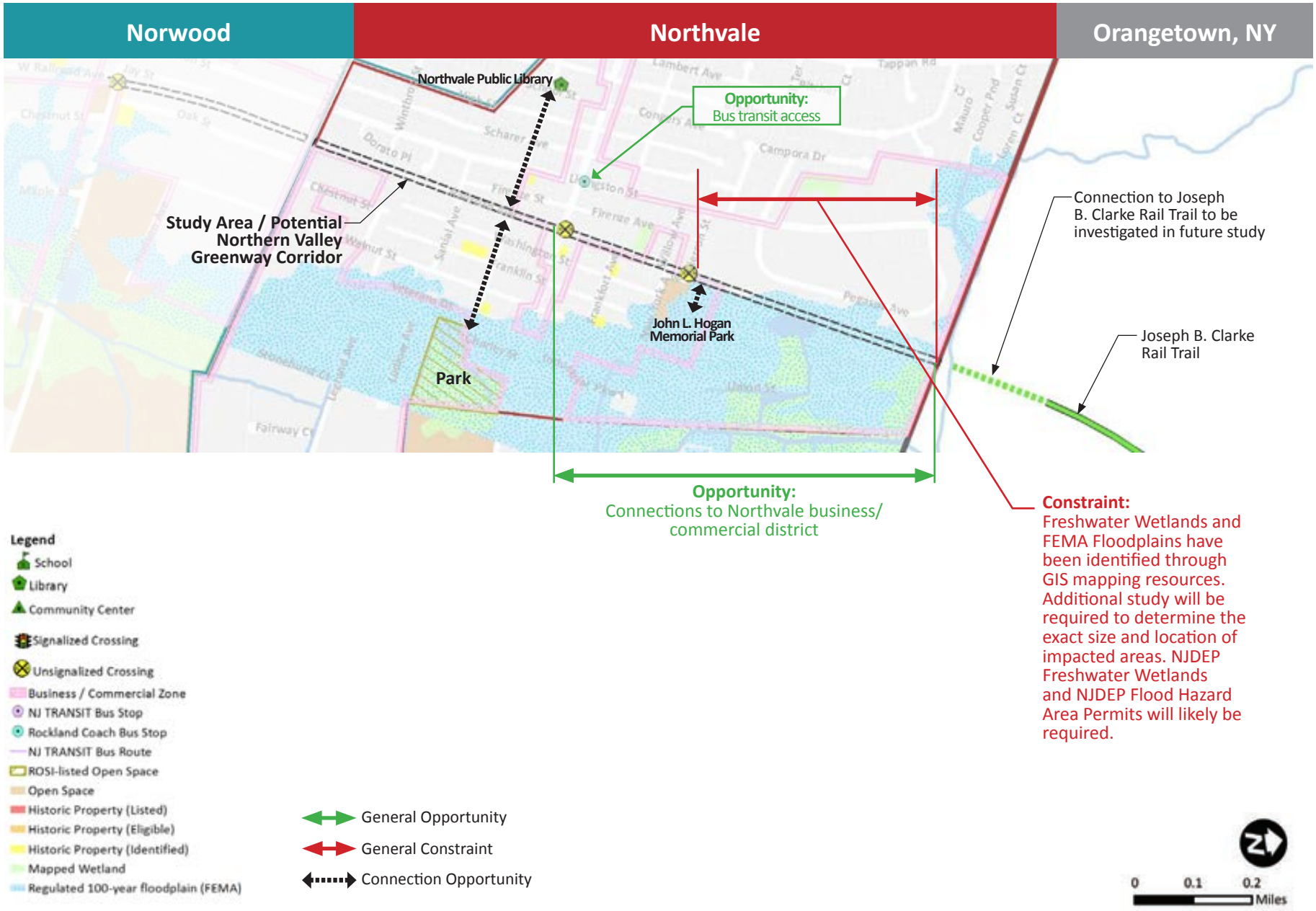
Map 2.9.4. Closter Opportunities and Constraints Map



Map 2.9.5. Norwood Opportunities and Constraints Map



Map 2.9.6. Northvale Opportunities and Constraints Map



Data Sources

Map 2.1: Northern Valley Greenway Study Area

- Municipalities of New Jersey, New Jersey State Plane NAD83, New Jersey Office of Information Technology, Revised/Published July 2016, Accessed July 2018.
- Freight Rail Lines 2012, New Jersey Department of Transportation, Accessed July 2018.
- Base Map: ESRI World Street Map.

Map 2.2: Northern Valley Greenway Potential for Regional Connectivity

- Municipalities of New Jersey, New Jersey State Plane NAD83, New Jersey Office of Information Technology, Revised/Published July 2016, Accessed July 2018.
- Freight Rail Lines 2012, New Jersey Department of Transportation, Accessed July 2018.
- Base Map: ESRI World Street Map.

Map 2.3: Road Crossings Inventory

- Municipalities of New Jersey, New Jersey State Plane NAD83, New Jersey Office of Information Technology, Revised/Published July 2016, Accessed July 2018.
- New Jersey Road Centerlines, New Jersey Office of Information Technology, Accessed July 2018.
- Freight Rail Lines 2012, New Jersey Department of Transportation, Accessed July 2018.
- New Jersey 2015 High Resolution Orthophotography, NAD83(2011) NJ State Plane Feet, MrSID Tiles, NJ Office of Information Technology, Published February 2016, Accessed July 2018.

Crossings Assessment Aerials

- Nearmap aerial imagery services, imagery date April 23, 2018.

Map 2.4: Bridges and Culverts

- Municipalities of New Jersey, New Jersey State Plane NAD83, New Jersey Office of Information Technology, Revised/Published July 2016, Accessed July 2018.
- New Jersey Road Centerlines, New Jersey Office of Information Technology, Accessed July 2018.
- Freight Rail Lines 2012, New Jersey Department of Transportation, Accessed July 2018.
- Bridge and Culvert locations as observed through field reconnaissance and review of high resolution aerial mapping.

Map 2.5: Utilities

- Municipalities of New Jersey, New Jersey State Plane NAD83, New Jersey Office of Information Technology, Revised/Published July 2016, Accessed July 2018.
- Freight Rail Lines 2012, New Jersey Department of Transportation, Accessed July 2018.
- Base Map: ESRI World Street Map.
- Utility locations as observed through field reconnaissance and review of high resolution aerial mapping.

Map 2.6: Bus Routes and Stops

- Municipalities of New Jersey, New Jersey State Plane NAD83, New Jersey Office of Information Technology, Revised/Published July 2016, Accessed July 2018.
- Freight Rail Lines 2012, New Jersey Department of Transportation, Accessed July 2018.
- NJ TRANSIT Bus Routes Currently Operating, 2018, New Jersey Office of Information Technology, Revised/Published July 2018, Accessed November 2018.
- New Jersey Bus Stops, 2018, New Jersey Office of Information Technology, Revised/Published June 2018, Accessed November 2018.
- Rockland Coach bus stops mapped based on published schedules and Northern Valley Greenway Committee input.
- Base Map: ESRI World Street Map.

Map 2.7: Inventory of Schools and Municipal Assets

- Municipalities of New Jersey, New Jersey State Plane NAD83, New Jersey Office of Information Technology, Revised/Published July 2016, Accessed July 2018.
- New Jersey Road Centerlines, New Jersey Office of Information Technology, Accessed July 2018.
- Building Footprints, June 28, 2018 developed by Microsoft Bing and OpenStreetMap, Accessed November 2018.
- Bergen County Parcel Data, 2009 -2013 and associated Mod IV Tax List, 2017, Bergen County, NJ Office of Information Technology, NJGIN Information Warehouse, Accessed August 2018.
- New Jersey Public, Private and Charter School Point Locations, 2017, New Jersey Office of Information Technology, Revised/Published June 2018, Accessed November 2018.
- Municipal points of interest provided by Northern Valley Greenway Committee and refined through desktop verification, November 2018.

Map 2.8: Adjacent Land Use and Right-of-Way Cross Section Analysis

- Municipalities of New Jersey, New Jersey State Plane NAD83, New Jersey Office of Information Technology, Revised/Published July 2016, Accessed July 2018.
- New Jersey Land Use/Land Cover 2012 Update, Edition 20150217 Subbasin 02030101 - Lower Hudson, Subbasin 02030103 - Hackensack-Passaic (Land_lu_2012_hu02030101_103) Land Use/ Land Cover 2012, NJ Department of Environmental Protection, Revised/Published February 2015, Accessed July 2018.
- New Jersey 2015 High Resolution Orthophotography, NAD83(2011) NJ State Plane Feet, MrSID Tiles, NJ Office of Information Technology, Published February 2016, Accessed July 2018.
- Business/Commercial Zones interpreted from Zoning Maps for project corridor municipalities:
  - Tenafly: 2013 Land Use Element, Land Use Plan map, June 21, 2013.
  - Cresskill: Zoning Map, Borough of Cresskill – Bergen County – New Jersey, April 9, 2008.
  - Demarest: Zoning Map, Borough of Demarest, New Jersey, November 1966 and Demarest Land Use Element Update, April 10, 1996.
  - Closter: Zoning Map, Borough of Closter, May 1, 2015.
  - Norwood: Existing Zoning Map, Borough of Norwood, New Jersey Mater Plan Reexamination, August 2008.
  - Northvale: Borough of Northvale Zoning Map, November 11, 2009.

Map 2.9 Series *(.1 thru .6)*: Opportunities and Constraints

- Municipalities of New Jersey, New Jersey State Plane NAD83, New Jersey Office of Information Technology, Revised/Published July 2016, Accessed July 2018.
- New Jersey Road Centerlines, New Jersey Office of Information Technology, Accessed July 2018.
- Building Footprints, June 28, 2018 developed by Microsoft Bing and OpenStreetMap, Accessed November 2018.
- Bergen County Parcel Data, 2009 -2013 and associated Mod IV Tax List, 2017, Bergen County, NJ Office of Information Technology, NJGIN Information Warehouse, Accessed August 2018.
- New Jersey Public, Private and Charter School Point Locations, 2017, New Jersey Office of Information Technology, Revised/Published June 2018, Accessed November 2018.
- Municipal points of interest provided by Northern Valley Greenway Committee and refined through desktop verification, November 2018.NJ TRANSIT Bus Routes Currently Operating, 2018, New Jersey Office of Information Technology, Revised/Published July 2018, Accessed November 2018.
- New Jersey Bus Stops, 2018, New Jersey Office of Information Technology, Revised/Published June 2018, Accessed November 2018.
- Rockland Coach bus stops mapped based on published schedules and Northern Valley Greenway Committee input.
- New Jersey Land Use/Land Cover 2012 Update, Edition 20150217 Subbasin 02030101 - Lower Hudson, Subbasin 02030103 - Hackensack-Passaic (Land_lu_2012_hu02030101_103) Land Use/ Land Cover 2012, NJ Department of Environmental Protection, Revised/Published February 2015, Accessed July 2018.
- FEMA Flood Mapping Data, FEMA Flood Map Service Center, Accessed August 2018.
- Bridges and Culverts interpreted from field reconnaissance August 2018, interpretation of aerial imagery, and 1975 Sanitary Sewer and Storm Drain Map of Tenafly, developed October 2018.
- National Hydrography Dataset Streams 2002, New Jersey Department of Environmental Protection, Revised/Published August 2010, Accessed August 2018.
- National Hydrography Dataset Waterbody 2002, New Jersey Department of Environmental Protection, Revised/Published August 2010, Accessed August 2018.

CHAPTER

3 Environmental Review

Northern Valley Greenway

Technical Planning Assistance Report

July 2019

Chapter 3 Contents

3.1 Introduction

This chapter presents an initial ecological/environmental/cultural resources screening to assess the preliminary environmental feasibility of the potential Northern Valley Greenway. The screening has been conducted primarily as a GIS-based desktop review with a preliminary site visit/visual reconnaissance to verify the relative accuracy of the GIS mapping. The information collected in this screening would ultimately be required as part of completion of a National Environmental Protection Act (NEPA) documentation for the proposed greenway should federal funds be sought in the future. The screening includes information/ data necessary for a preliminary environmental resources/constraints inventory as well as a preliminary assessment of environmental impacts to areas of ecological, environmental, and/or cultural concern within the project limits.

This chapter identifies constraints and resources associated with the study area, assesses the likelihood of impacts to environmental resources, and provides an initial summary of regulatory approvals/ permits that would be required. Maps are provided throughout the chapter to aid in overall clarity and all data sources used in the preparation of maps have been cataloged in a geodatabase associated with this study.

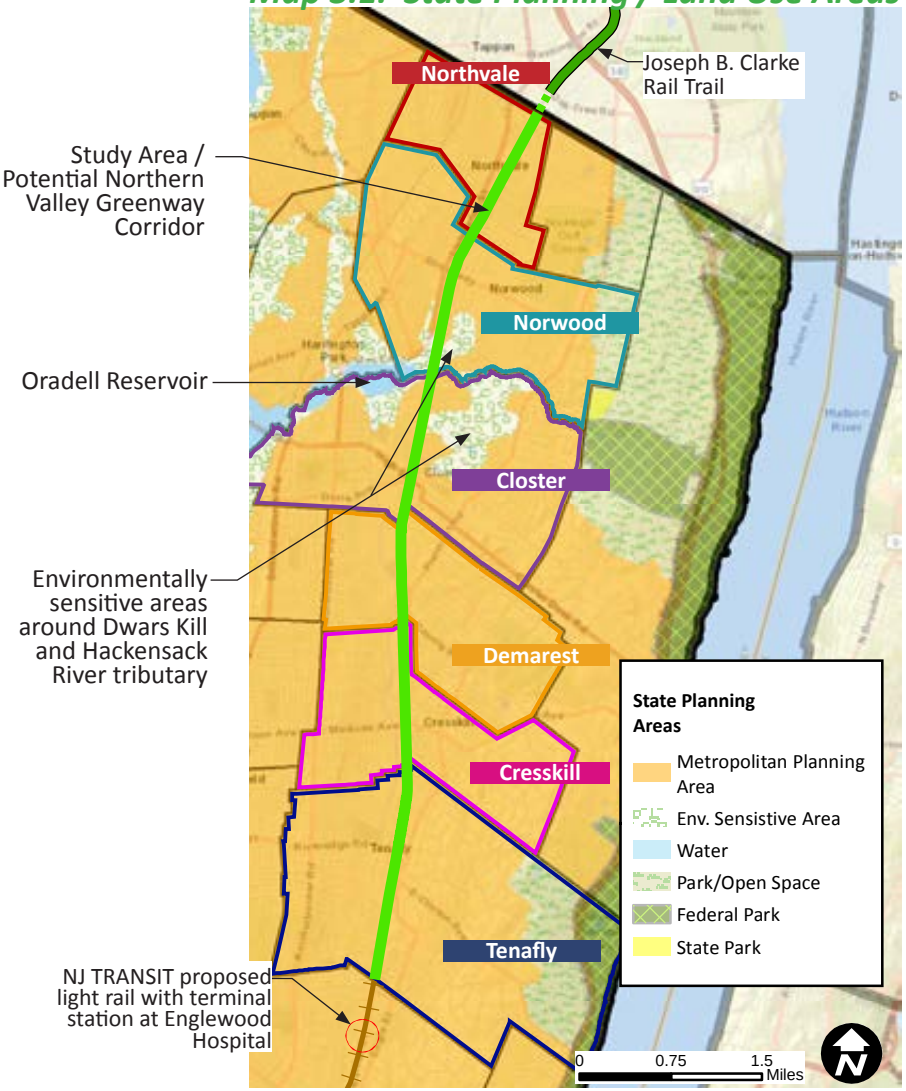
This chapter is a resource for consultation in future studies by others. The findings of this desktop environmental assessment have informed the development and assessment of conceptual alternatives for the potential greenway (see *Chapter 4: Conceptual Alternatives Assessment*). In future phases of work by others, this chapter will serve as a resource in developing technical scopes of work, especially those related to NJDEP permitting and approvals.

3.2 State Planning / Land Use Areas

According to the Planning Areas dataset of the New Jersey State Development and Redevelopment Plan, (as shown in Map 3.1) the majority of the proposed Northern Valley Greenway is within the Metropolitan Planning Area (defined as an area for growth). However, there are mapped Environmentally Sensitive Planning Areas around the Dwars Kill and Hackensack River tributary leading to Oradell Reservoir. In Environmentally Sensitive Planning Areas, "planning should promote a balance of conservation and limited growth—environmental constraints affect development and preservation is encouraged in large contiguous tracts" (www.nj.gov/state/planning/spc-state-plan.html).

Generally, the proposed greenway is located within the Metropolitan Planning Area, but forest, waterways, and wetlands traverse the site and are located within 200 feet of the path. The proximity of these features increases the potential for environmental impacts and the need for associated environmental permits.

Map 3.1. State Planning / Land Use Areas



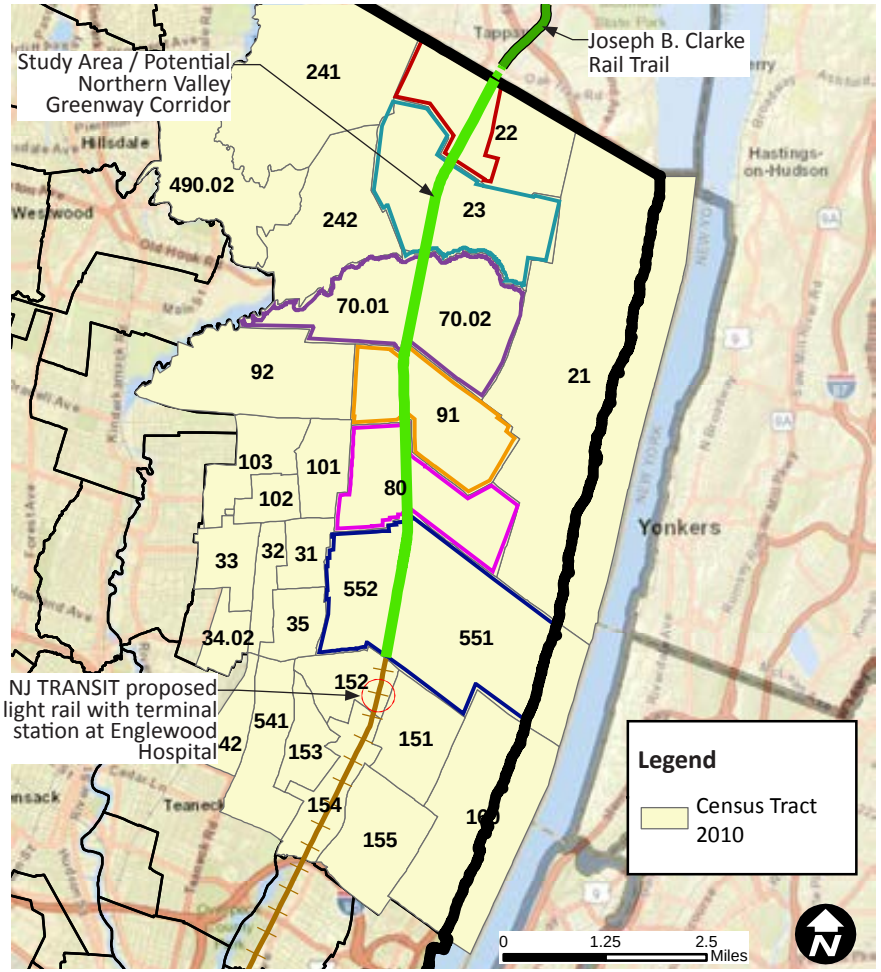
3.3 Demographics

According to U.S. Census 2010 population data, there are approximately 170,000 people living within two miles of the potential Northern Valley Greenway study area. This estimate is determined by mapping the 2010 Census tracts within two miles of the study area (see Map 3.2) and calculating the population sum.

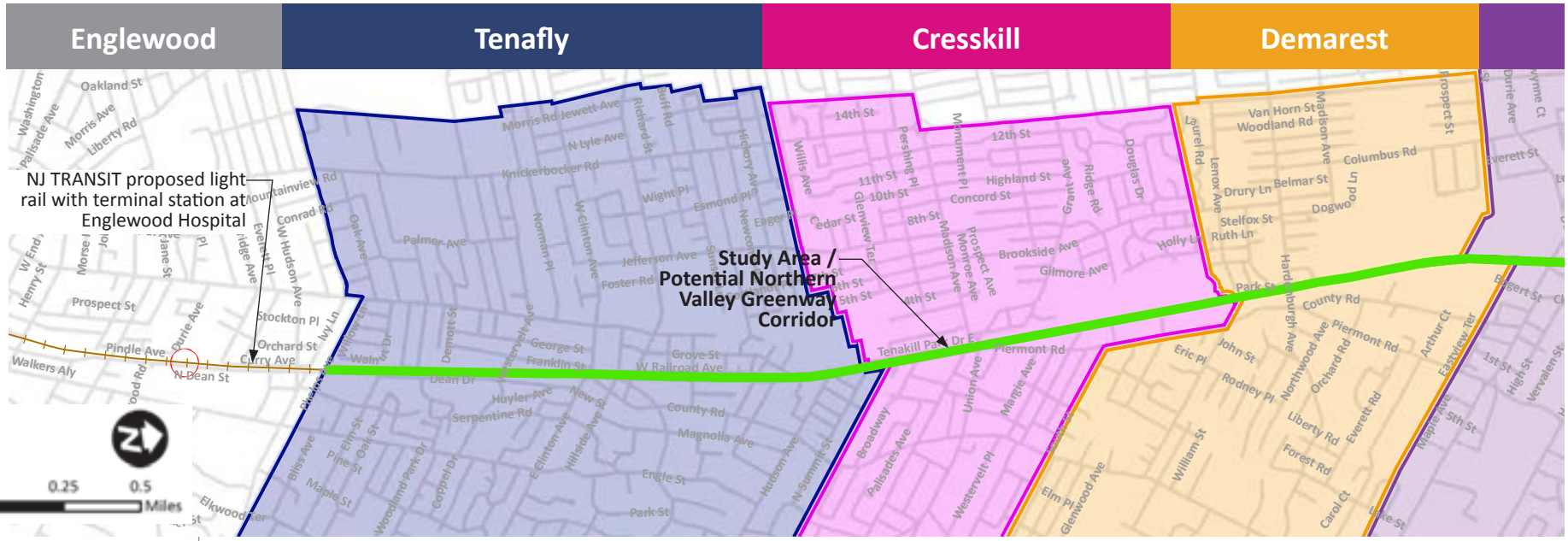
Additionally, the USEPA EJSCREEN (Environmental Justice Screening and Mapping Tool) was used to identify information about block groups surrounding the path. Based on the 2010 Census block groups surrounding the pathway, the percent minority population ranged from 26% to 86%, while the 2011-2015 ACE 5-year estimates ranged between 28% and 81%. Therefore, some minority populations are located along the pathway. The per capita income based on the 2011-2015 ACE 5-year estimates ranged from $26,713 to $111,804. Poverty status for Bergen County is 7.5% and, based on Poverty Status in the Past 12 Month 2012-2018 American Community Survey 5-year estimates for Census Tract, poverty ranged between 2% to 16.6%.

A general demographic overview of the municipalities in the greenway study area is provided in Map 3.3. Based on data from the 2016 American Community Survey, Map 3.3 provides a comparison among the six municipalities in the current study area in terms of population, geographic area, and household income, and racial makeup. Similar data is also provided for Englewood, NJ and Orangetown, NY. There is not a significant percentage of the population within the study area with an income below the poverty level, nor are there any significant percentage of minority communities that would be impacted by the proposed greenway. Based on these factors, it is not anticipated that there will be Environmental Justice issues associated with the project.

Map 3.2. 2010 Census Tract Population



Map 3.3. Demographic Overview Map of Project Area by Municipality

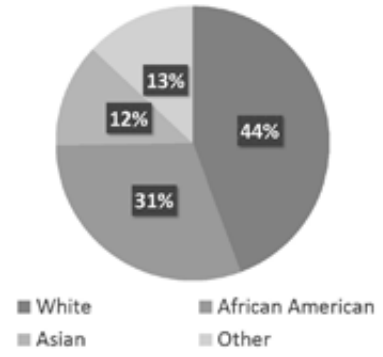


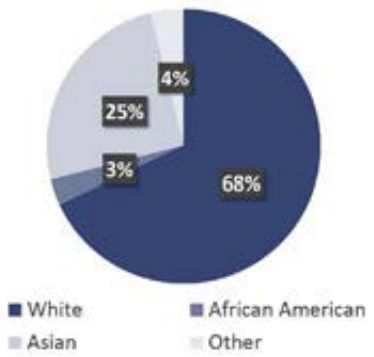
Englewood	
Greenway Distance	TBD future study
Population (2016)	28,184
Square Miles	4.9
Average Household Income ($)	122,600

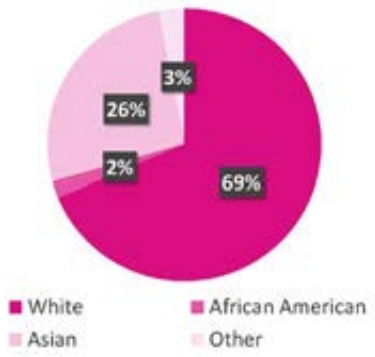
Tenafly	
Greenway Distance	1.8 mi
Population (2016)	14,821
Square Miles	5.2
Average Household Income ($)	206,605

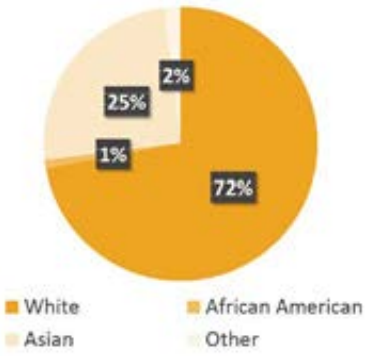
Cresskill	
Greenway Distance	1.3 mi
Population (2016)	8,745
Square Miles	2.1
Average Household Income ($)	157,918

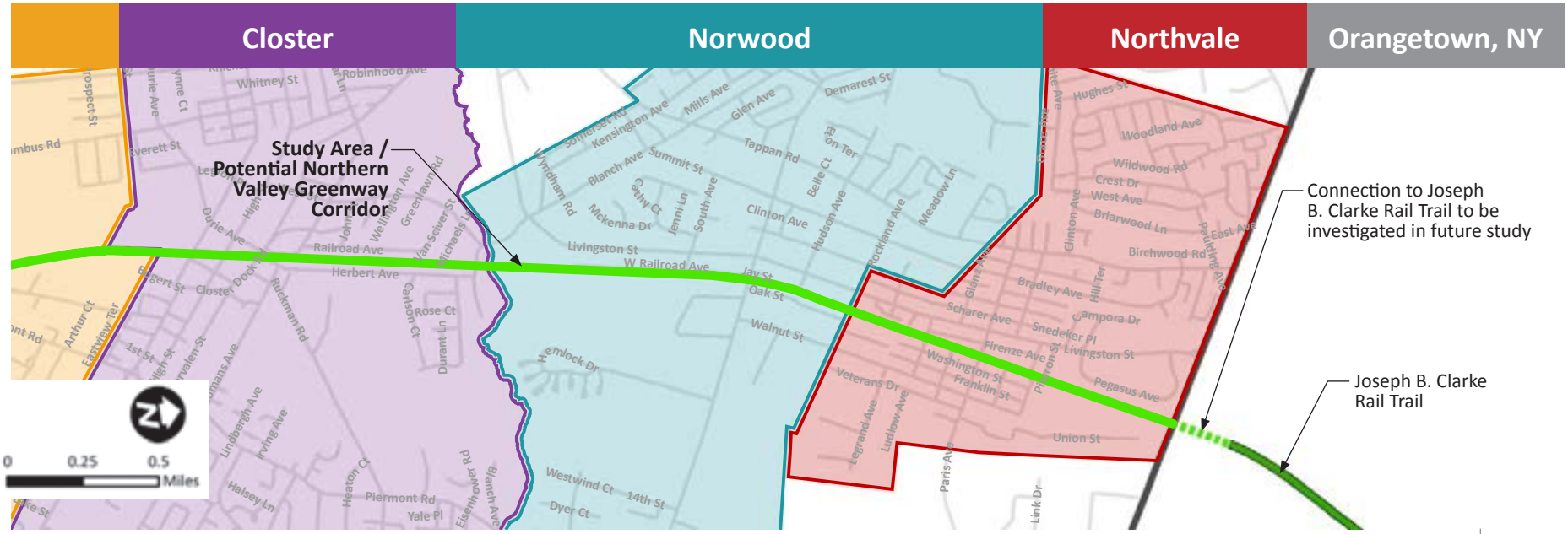
Demarest	
Greenway Distance	0.9 mi
Population (2016)	5,007
Square Miles	2.1
Average Household Income ($)	225,589



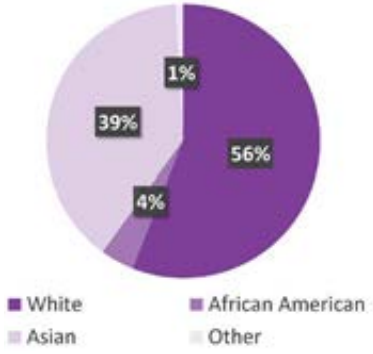




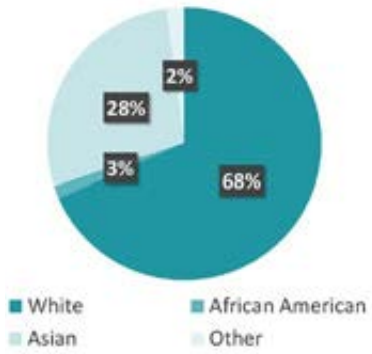




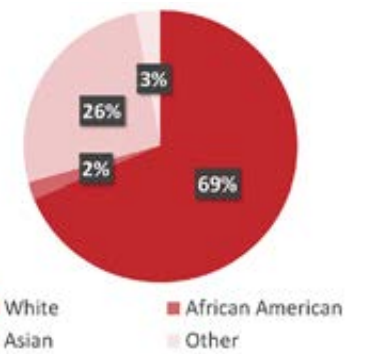
Greenway Distance	1.1 mi
Population (2016)	8,650
Square Miles	3.3
Average Household Income ($)	157,346



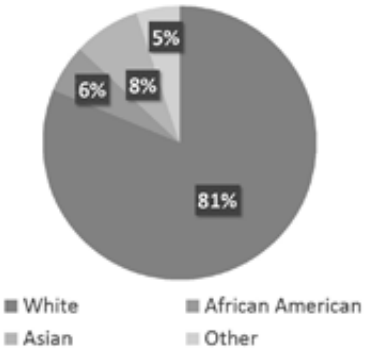
Greenway Distance	1.2 mi
Population (2016)	5,828
Square Miles	2.7
Average Household Income ($)	172,429



Greenway Distance	1.1 mi
Population (2016)	4,801
Square Miles	1.3
Average Household Income ($)	107,744



Greenway Distance	TBD future study
Population (2016)	50,175
Square Miles	31.3
Average Household Income ($)	125,950



Source: American Community Survey 2016

3.4 Water Resources

Watershed Overview

Based on the 14-digit hydrologic units in New Jersey (accessed through NJDEP), the proposed greenway traverses Watershed Management Area #5 – Hackensack, Hudson, and Pascack and four subwatersheds: Sparkill Brook, Dwars Kill, Tenakill Brook, and Overpeck Creek. (See Map 3.4).

South of the study area in Englewood, a future connection to the proposed NJ TRANSIT Light Rail terminal station at Englewood Hospital and Medical center would continue through the Overpeck Creek subwatershed. North of the study area in Orangetown, NY, a future connection to the Joseph B. Clarke Rail Trail would continue through the Middle Sparkill Creek subwatershed and reach the Lower Sparkill Creek subwatershed, based on the Rockland County Base Map for Public Users (Version 1.0 December 2017 updated).

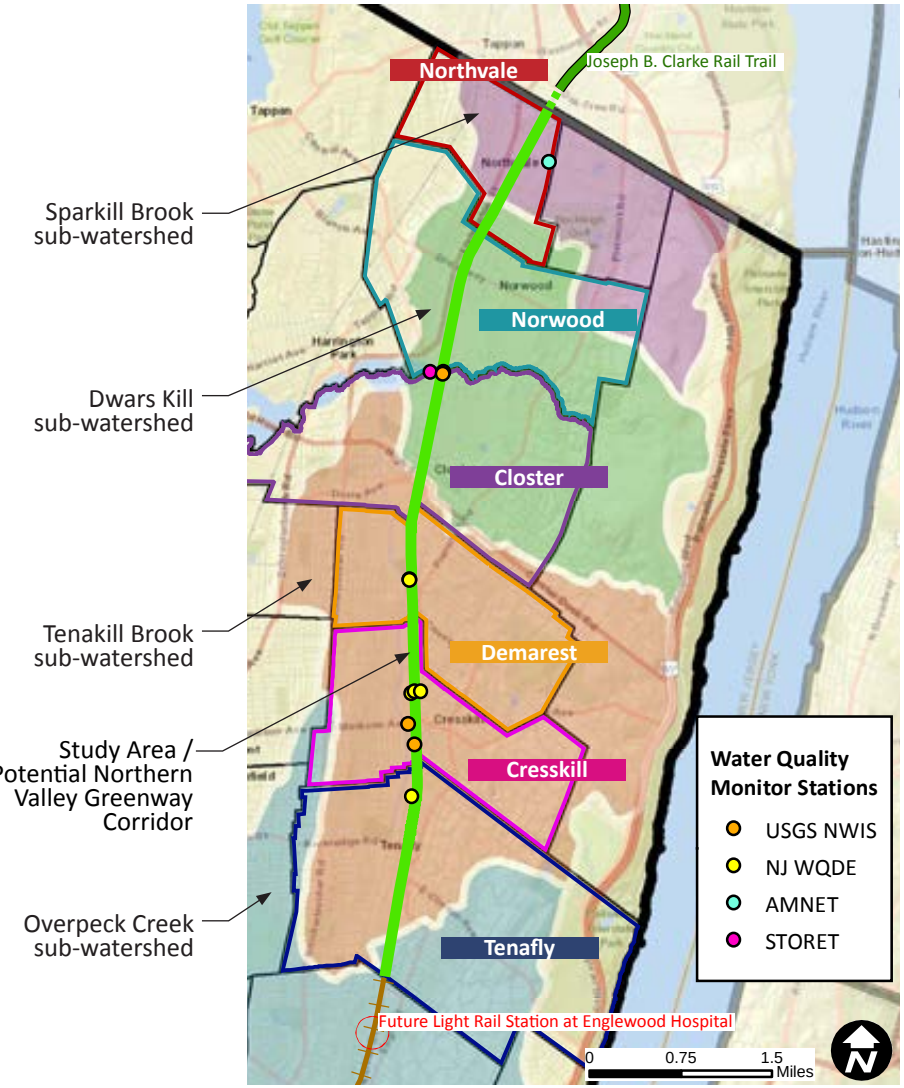
Within the New Jersey segment, the proposed greenway is located within 200 feet of a Tier 3 Non-Community Wellhead Protection Area. The study area does not reside in a sole source aquifer. The project is not located in an NJDEP mapped Tidelands grid and there are no "claimed" tidelands mapped.

Water Quality Monitoring

Several water quality monitor stations (WQMS) are within close proximity to the project area and within streams that intersect the proposed greenway. As shown on the map to the right, the WQMSs include:

- 3 USGS NWIS (National Water Information System)
- 5 NJ WQDE (Water Quality Data Exchange)
- 1 NJDEP AMNET (Ambient Macroinvertebrate Network)
- 1 US EPA STORET

Map 3.4. Watershed Overview



Watercourses

Within the study area, the potential greenway right-of-way crosses a watercourse at seven locations (see Map 3.6). The crossings include:

No.	Watercourse	Municipal location
1	Tenakill Brook tributary (1)	Tenafly
2	Cresskill Brook	Cresskill
3	Demarest Brook	Cresskill
4	Tenakill Brook (1)	Demarest
5	Tenakill Brook (2)	Demarest
6	Dwars Kill	Closter/Norwood border
7	Hackensack River tributary	Norwood

The seven watercourses listed above, in addition to the Demarest Brook tributary that abuts the right-of-way in Cresskill, have NJDEP Surface Water Quality Standard classifications, per N.J.A.C. 7:9B, of FW2-NTC1, which indicates a Category 1, non-trout freshwater waterway. Category 1 waters have a 300-foot riparian zone and have antidegradation policies to protect them from measurable changes in water quality based on exceptional ecological significance, exceptional recreational significance, exceptional water supply significance, or exceptional fisheries resource(s) to protect their aesthetic value (color, clarity, scenic setting), and ecological integrity (habitat water quality and biological function).

South of the study area in Englewood, a future connection to the proposed NJ TRANSIT Light Rail terminal station at Englewood Hospital and Medical center would cross Overpeck Creek. Overpeck Creek has a surface water quality classification of FW2-NT/SE2, per N.J.A.C. 7:9B, indicating a waterway in which there may be an estuarine/freshwater interface due to the tidal range of the Hackensack River.

North of the study area in Orangetown, NY, a future connection to the Joseph B. Clarke Rail Trail would cross Sparkill Creek. Sparkill Creek is located in New York; therefore, it does not have a NJDEP Surface Water Quality Standard classification. Rather, New York designated this as a Class C water that supports fisheries and is suitable for non-contact activities. It is not known to support trout. Migratory fish runs for Alewife and Brook Trout were identified on the NYDEC Hudson Valley Natural Resource Mapper for a section of the Sparkill Creek located less than 800 feet eastward.

Wetlands / Transition Areas

Based on analysis of NJDEP Land Use Land Cover data, the study area intersects mapped wetlands at eight locations that vary in size along the right-of-way.

NJDEP Freshwater Wetlands Permits (N.J.A.C. 7:7A) are required for impacts to freshwater wetlands and/or associated transition areas, as well as State Open Waters. Mapped wetlands and likely impact areas are included on Map 3.6.

Transition areas vary from 0 feet for state open waters/ordinary resource value wetlands, to 150 feet for exceptional value wetlands. Further study of wetland impacts will need to be conducted to determine the exact size and locations of wetland impacts and transition areas.

When pursuing the NJDEP Freshwater Wetlands Permit, (N.J.A.C. 7:7A), the project will be required to:

- Show minimization of impacts
- Coordinate with study/findings for Threatened and Endangered (T&E) species
- Address wetland mitigation (on-site, off-site, or via banking)

FEMA Floodplains / Riparian Zones

Based on analysis of FEMA Floodplain data, the study area intersects mapped floodplain at six locations that vary in size along the right-of-way.

NJDEP Flood Hazard Area Permits (N.J.A.C. 7:13) are required for disturbances to watercourses (Floodways / Floodplains and Riparian Zones). Mapped FEMA floodplain and likely impact areas are included on Map 3.6.

Riparian Zones will vary from 50 feet to 300 feet. Further assessment of the watercourses will need to be conducted to determine the exact size and locations of Riparian Zones.

When pursuing the NJDEP Flood Hazard Area Permit, (N.J.A.C. 7:13), the project will be subject to the following requirements:

- No fill allowed within a floodway (the primary conveyance area)
- Impacts to floodplain areas must be evaluated to show no increase in off-site flood elevations
- If impacts to riparian zones exceed what is allowable, mitigation will be required (on-site, off-site or via banking)

Note: For NJDEP Flood Hazard Area Permitting, if subject watercourses are state studied, the associated study is to be utilized in lieu of the FEMA study.

3.5 Green Acres / Section 4(f) Properties

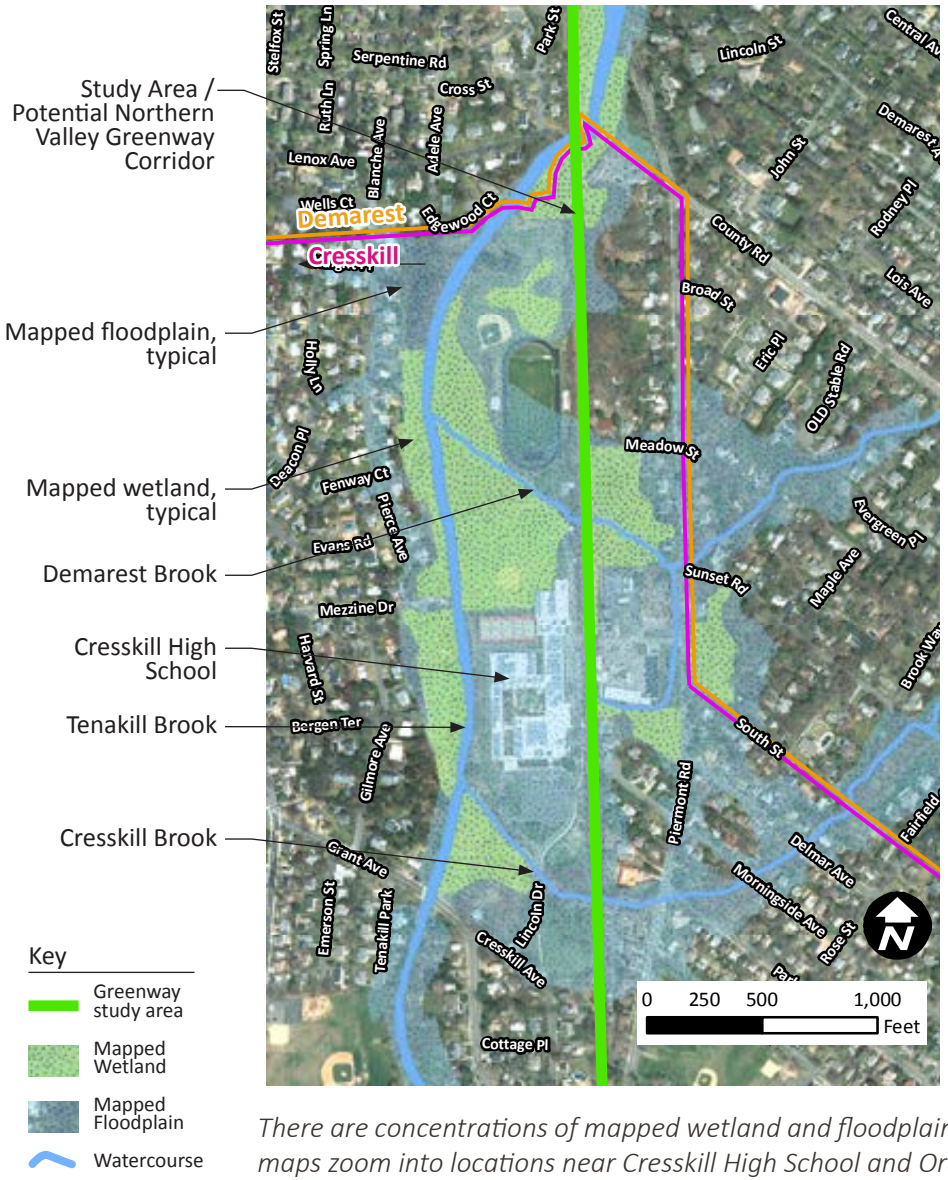
Parks and Open Space

According to data obtained through the NJDEP Green Acres Program Recreational and Open Space Inventory (ROSI), there are over 325 acres of municiaplity- or county-owned parks and open space located within 1,000 feet of the potential Northern Valley Greenway. The ROSI lists all Green Acres-funded, ROSI-restricted parkland and other lands held for conservation and/or recreation at the time the municipality or county last received funding from Green Acres. There are no state- or federally-owned parks or conservation lands within project area.

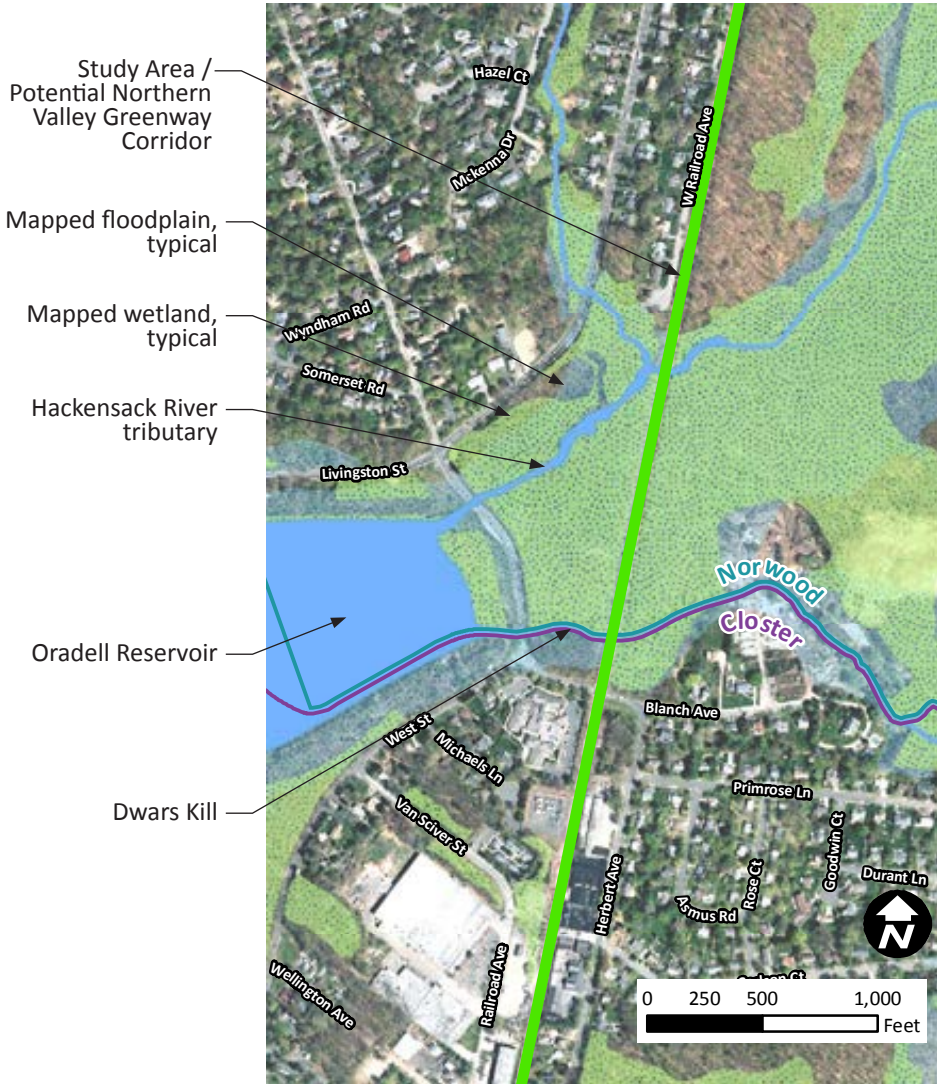
Map 3.7 and the corresponding ROSI-listed Open Space table provides an inventory of the open space assets within 1,000 feet of the proposed greenway. The vast majority of the acreage (97%) is owned by the adjoining municipalities. Only one parcel, a 10-acre portion of the Rockleigh County Golf Club in Northvale, is owned by Bergen County.

The right-of-way directly borders 18 tracts of ROSI-listed Open Space (highlighted in green in the ROSI-listed Open Space Table). Any proposed change to these or other ROSI-listed tracts may be subject to review and approval of the State of New Jersey Green Acres Program.

Map 3.5.1. Cresskill Wetland/Floodplain Area

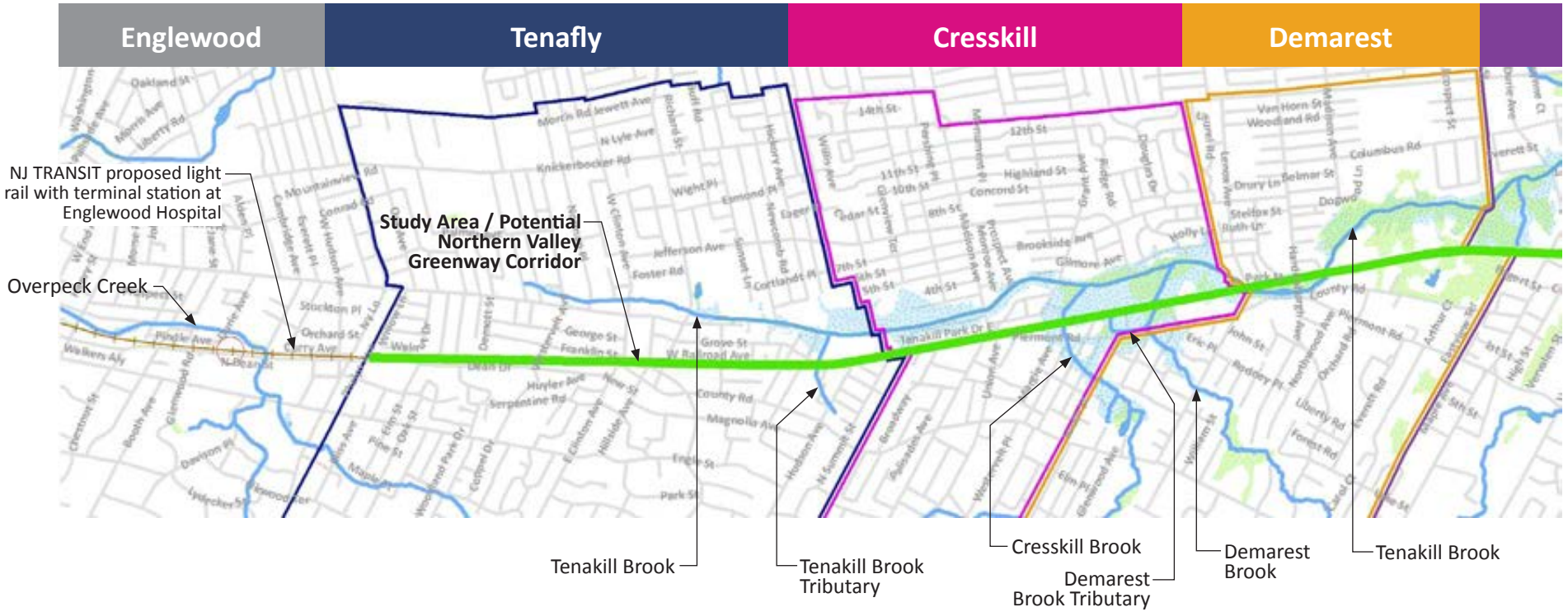


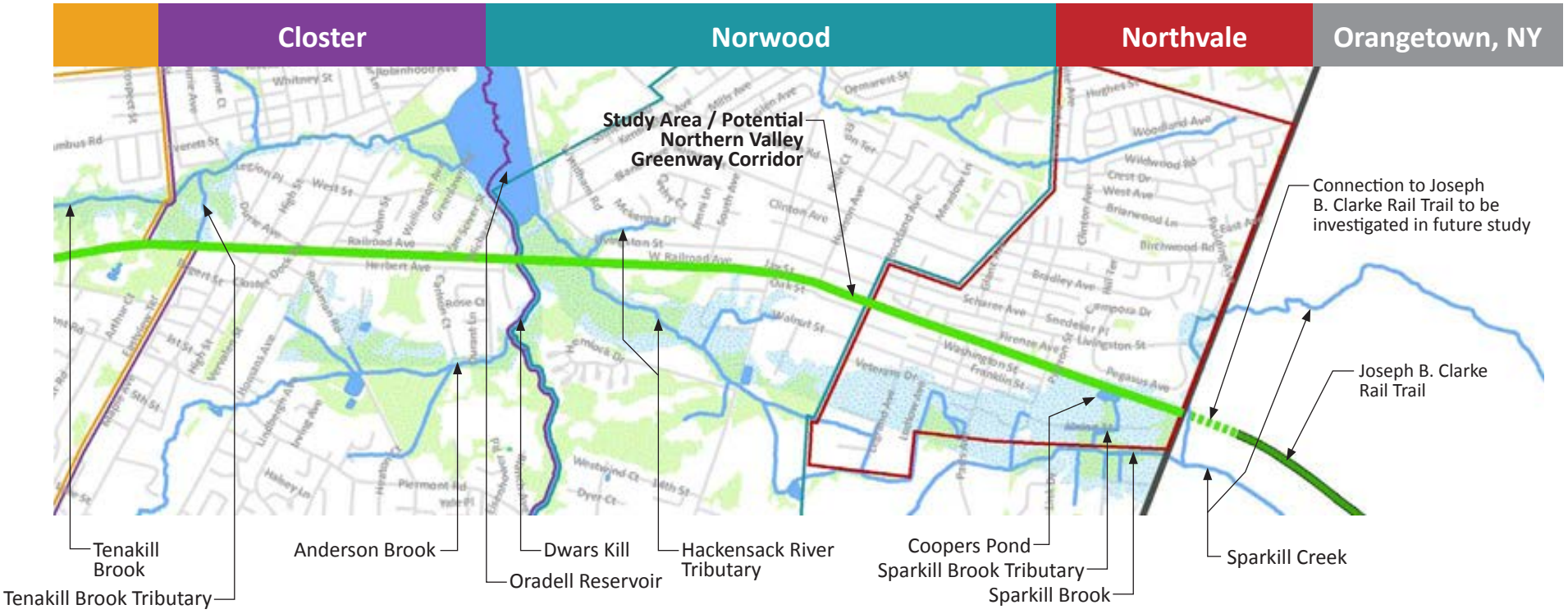
Map 3.5.2. Norwood Wetland/Floodplain Area

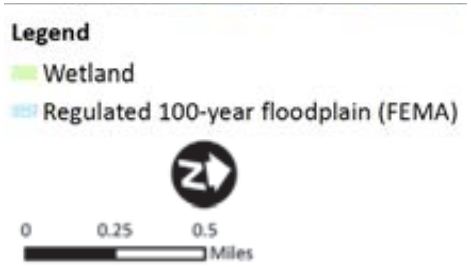


There are concentrations of mapped wetland and floodplain at various locations along the potential Northern Valley Greenway. These aerial maps zoom into locations near Cresskill High School and Oradell Reservoir.

Map 3.6. Watercourses, Wetlands, and Floodplain Inventory




Closter
Norwood
Northvale
Orangetown, NY
Study Area / Potential Northern Valley Greenway Corridor
Connection to Joseph B. Clarke Rail Trail to be investigated in future study
Joseph B. Clarke Rail Trail
Tenakill Brook
Tenakill Brook Tributary
Anderson Brook
Dwars Kill
Oradell Reservoir
Hackensack River Tributary
Coopers Pond
Sparkill Brook Tributary
Sparkill Brook
Sparkill Creek


Legend
Wetland
Regulated 100-year floodplain (FEMA)
0
0.25
0.5
Miles

Cultural Resources (Historic Districts and Sites)

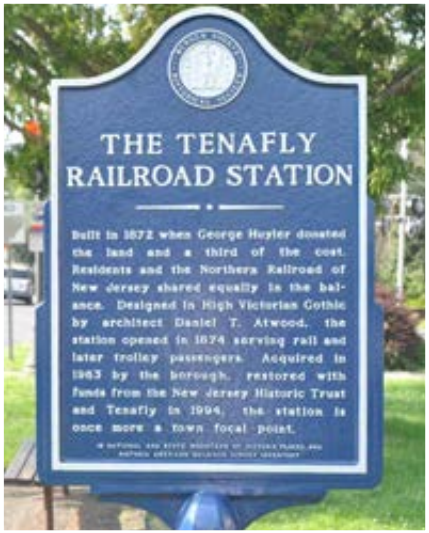
There are eight sites listed on State and National Registers of Historic Places within 1000 feet of the potential Northern Valley Greenway. Three of the eight sites listed on State and National Registers are directly adjacent to the study area, including Tenafly Railroad Station, Demarest Railroad Station, and the John Meyerhoff House. Refer to Map 3.7 for locations of the listed sites.

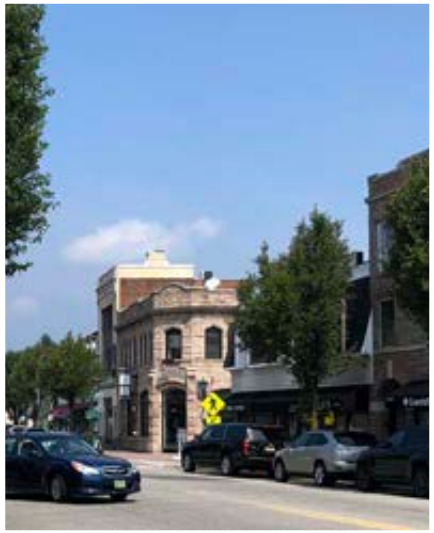
The Northern Branch Corridor travels through a single historic district: the Closter Historic District in Closter. The Closter Historic District has a Certificate of Eligibility (COE date May 16, 2002) from the NJDEP Historic Preservation Office, but the district is not listed on the State or National Registers, nor is it designated locally.

The Closter Historic District contains over 250 sites that are categorized as eligible for inclusion in the registers through federal or state processes administered by the New Jersey Historic Preservation Office.

The Northern Valley Greenway project will eventually require review and approval through the NJDEP New Jersey Historic Preservation Office (N.J.A.C. 7:4). This coordination is required, per the New Jersey Register of Historic Places Law and Section 106 of the National Historic Preservation Act due to potential impacts on various historic sites and districts within the project area. The potential mitigation of impacts may include additional studies and/or incorporation of interpretive signage.

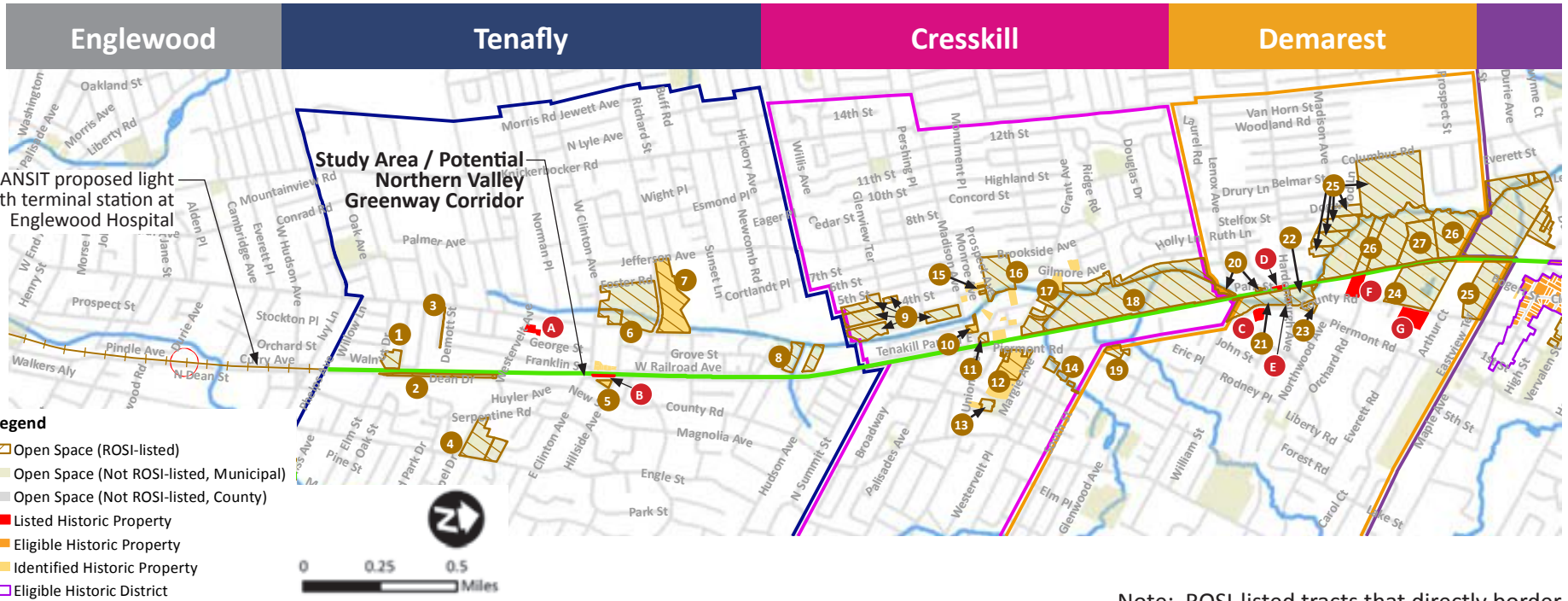
Clockwise from top left: Walnut Park in Tenafly, North Park in Demarest, Park adjacent to Demarest Train Station (listed in ROSI as FW Mcintire), and John L. Hogan Memorial Park in Northvale (not listed in ROSI).






Clockwise from top left: Tenafly Railroad Station interpretive sign in Tenafly, View north on Harrington Avenue from proposed greenway project area within Closter Historic District, Veterans Park in Closter Historic District.

Map 3.7. Green Acres/Section 4(f) Properties



Note: ROSI-listed tracts that directly border the right-of-way are highlighted in green.

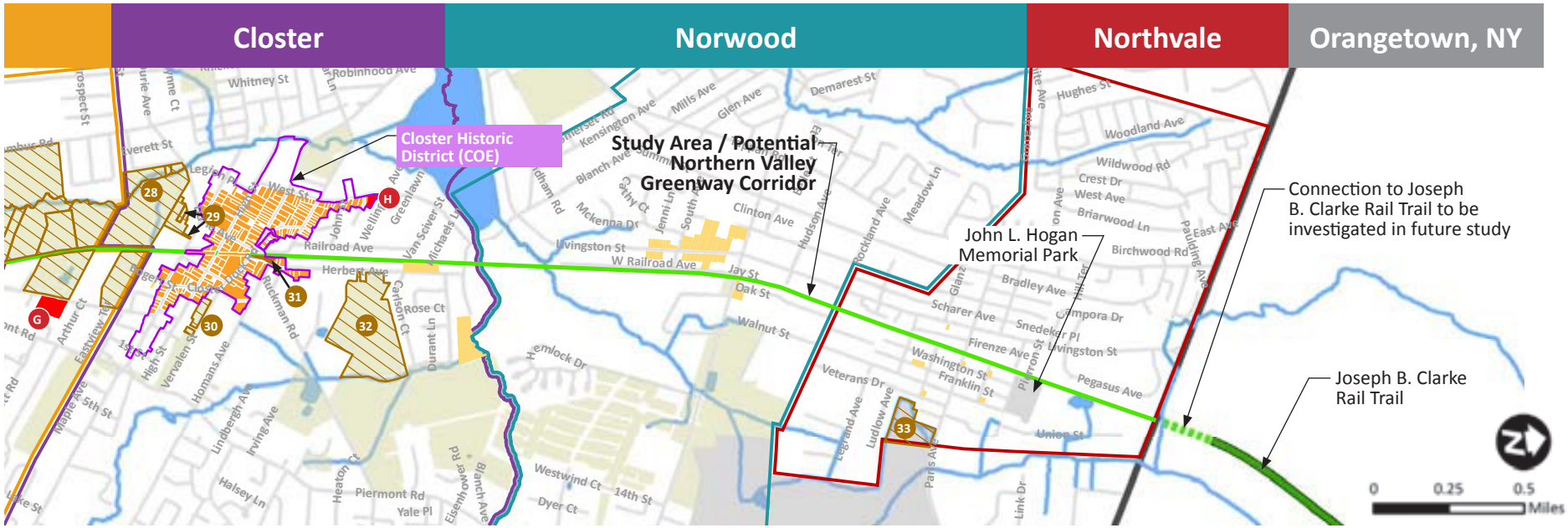
ROSI-listed Open Space Table

ID	Name	Acres	Owner
1	Walnut Park	2.0	Tenafly Boro.
2	Dean Park	2.1	Tenafly Boro.
3	Boro Park (Undeveloped)	0.1	Tenafly Boro.
4	Davis-Johnson Park	5.3	Tenafly Boro.
	Englest Park Acq	2.0	Tenafly Boro.
5	Huyler Park	0.4	Tenafly Boro.
6	Municipal Center / Oresko Park	1.8	Tenafly Boro.
	Municipal Center / Oresko Park	14.1	Tenafly Boro.
7	Roosevelt Commons	10.5	Tenafly Boro.
8	Tenakill Swim Club (closed)	2.1	Tenafly Boro.
	Tenakill Swim Club (closed)	2.0	Tenafly Boro.
9	Swim Club/Third St Park	3.6	Cresskill Boro.
	Swim Club/Third St Park	2.4	Cresskill Boro.
	Tennis Center/Third St Park	3.2	Cresskill Boro.
	Third St Park	2.7	Cresskill Boro.
	Third St Park	0.5	Cresskill Boro.
10	Cresskill Ave Open Space	0.7	Cresskill Boro.
11	Station Green	0.5	Cresskill Boro.

ID	Name	Acres	Owner
12	Margie Avenue Playfield	4.4	Cresskill Boro.
	Piermont Rd Open Space	0.2	Cresskill Boro.
	Piermont Rd Open Space	0.1	Cresskill Boro.
	Piermont Rd Open Space	0.3	Cresskill Boro.
13	Ackerman Place Field	0.9	Cresskill Boro.
14	Stream Conservation Area	0.1	Cresskill Boro.
	Stream Conservation Area	1.0	Cresskill Boro.
	Stream Conservation Area	0.2	Cresskill Boro.
	Stream Conservation Area	0.5	Cresskill Boro.
15	Waverly Place Park	0.1	Cresskill Boro.
	Waverly Place Park	0.1	Cresskill Boro.
16	Bryan Elem. School P.F.	7.2	Cresskill Boro.
17	Tenakill Brook N. Conservation	3.7	Cresskill Boro.
	Tenakill Brook N. Conservation	2.8	Cresskill Boro.
	Tenakill Brook N. Conservation	2.1	Cresskill Boro.
	Tenakill Brook N. Conservation	1.1	Cresskill Boro.
	Tenakill Brook N. Conservation	6.5	Cresskill Boro.
18	High School Play Fields	34.9	Cresskill Boro.

ID	Name	Acres	Owner
19	South St Property	1.2	Demarest Boro.
20	Senior Citizen Center	0.6	Demarest Boro.
	Senior Citizen Center	0.2	Demarest Boro.
21	FW Mcintire Park	5.1	Demarest Boro.
22	North Park	2.6	Demarest Boro.
	North Park	0.1	Demarest Boro.
23	Firemans Memorial Park	0.6	Demarest Boro.
24	Open Space	14.6	Demarest Boro.
25	Nature Center	3.7	Demarest Boro.
	Nature Center	10.2	Demarest Boro.
	Nature Center	3.1	Demarest Boro.
	Nature Center	24.7	Demarest Boro.
	Nature Center	1.3	Demarest Boro.
	Nature Center	2.0	Demarest Boro.
26	Wakelee Field	4.0	Demarest Boro.
	Wakelee Field	10.9	Demarest Boro.
	Wakelee Field	8.7	Demarest Boro.
	Wakelee Field	11.2	Demarest Boro.

ID	Name	Acres	Owner
27	Swim Club	12.7	Demarest Boro.
28	Metropolitan Tract	0.7	Closter Boro.
	Metropolitan Tract	0.4	Closter Boro.
	Metropolitan Tract	3.3	Closter Boro.
	Metropolitan Tract	4.6	Closter Boro.
	Metropolitan Tract	26.2	Closter Boro.
29	Tenakill Brook	0.5	Closter Boro.
	Tenakill Brook	0.1	Closter Boro.
30	Vervalen Park	1.9	Closter Boro.
	Vervalen Park	0.4	Closter Boro.
31	Veterans Park	0.0	Closter Boro.
	Veterans Park	0.2	Closter Boro.
	Veterans Park	0.1	Closter Boro.
	Veterans Park	0.0	Closter Boro.
32	Nature Center	39.2	Closter Boro.
33	Rockleigh County G.C.	10.0	Bergen Co.



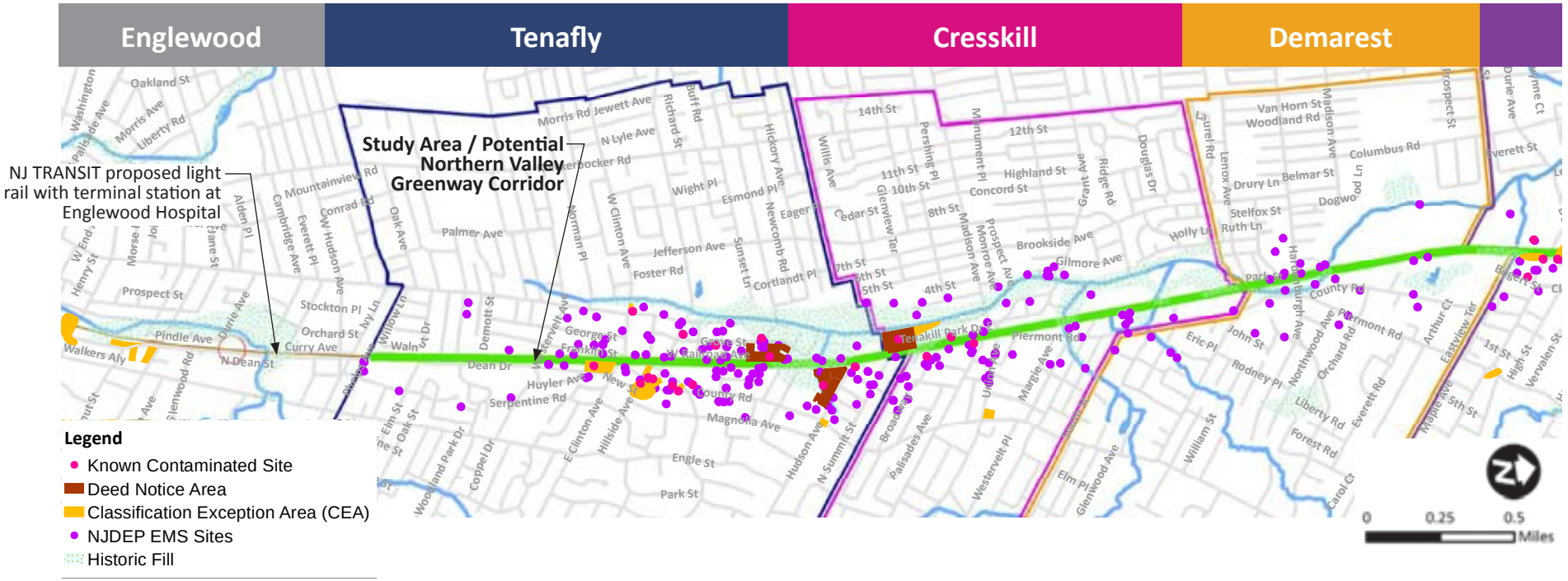
Historic Properties Table

ID	Historic Preservation Office (HPO) Listed Properties
A	Westervelt House
B	Tenafly Railroad Station
C	Samuel R. Demarest House
D	Demarest Railroad Depot
E	Hardenburgh Avenue Bridge over Tenakill Brook (SI&A #020009A)
F	John Meyerhoff House
G	Bogert House
H	Vervalen House

Legend

- Open Space (ROSI-listed)
- Open Space (Not ROSI-listed, Municipal)
- Open Space (Not ROSI-listed, County)
- Listed Historic Property
- Eligible Historic Property
- Identified Historic Property
- Eligible Historic District

Map 3.8. Contaminated Sites Desktop Screening

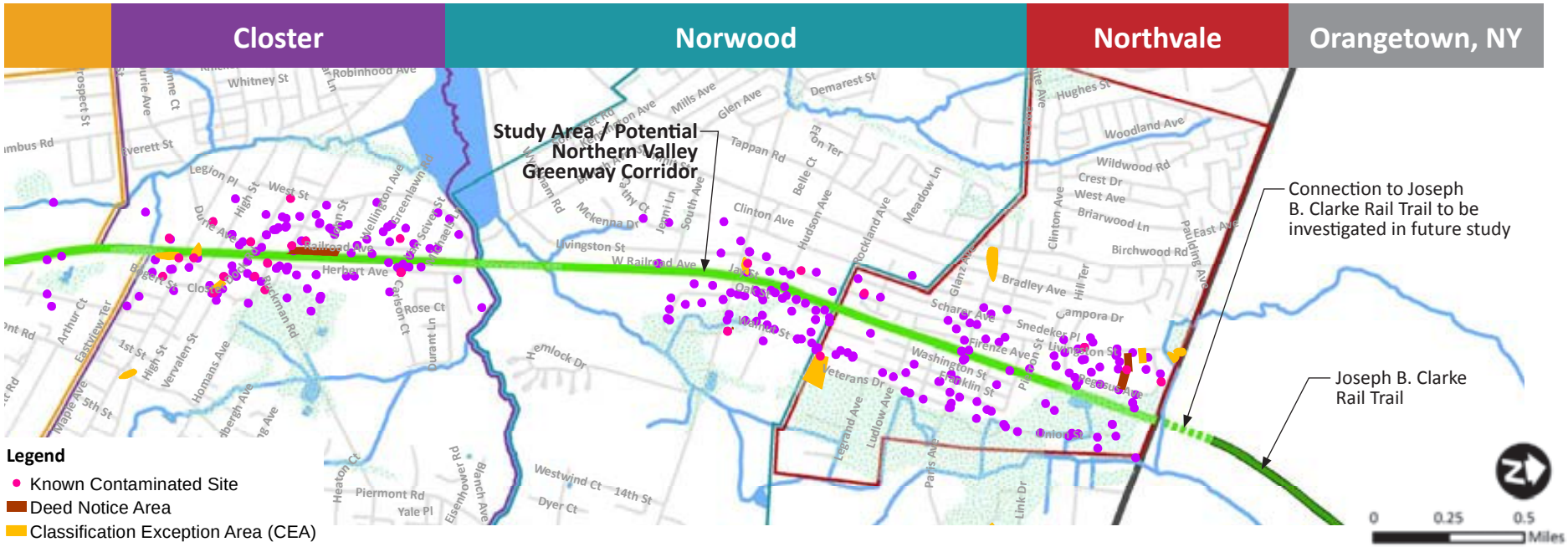


3.6 Contaminated Sites Desktop Screening

Per NJDEP, “NJEMS sites are points representing sites regulated by NJDEP under one or more regulatory permitting or enforcement programs, or sites that are otherwise of some interest to a NJDEP program.” There are 509 New Jersey Environmental Management System (NJEMS) sites present within 1000 feet of the study area. A small number of those sites, five to fifteen, are within the right-of-way or close proximity. However, these would have to be verified in a subsequent assessment due to the lack of precision in the geolocation methodology used in the NJEMS dataset.

The following key findings summarize the contaminated sites desktop screening:

- There are 47 Known Contaminated Sites (KCS) within 1000 feet of the study area. Per NJDEP, KCSs are, "properties within the state where contamination of soil or ground water at levels equal to or greater than applicable standards... where remediation is either currently under way, required but not yet initiated or has been completed."
- There are 22 Classification Exception Areas (CEA) within 1000 feet of the study area. Per NJDEP, CEAs are established whenever ground water standards in a particular area are not met to ensure that the use of ground water in that area is restricted until standards are achieved.



- There are six Deed Notice Areas within 1000 feet of the study area. Per NJDEP, a deed notice is a notification added to the title of a property when contamination will remain above NJDEP's residential/ unrestricted soil remediation standards (N.J.A.C. 7:26D).
- Historic fill is present along various sections of the study area. It was used to raise topographic elevation throughout New Jersey and is associated with contaminates.

3.7 Threatened and Endangered Species

The New Jersey Department of Environmental Protection Species Based Habitat dataset for the Piedmont Plains Region (also known as the Landscape Project) was used to identify wildlife habitat and Threatened and Endangered Species along the potential Northern Valley Greenway study area. See Map 3.10 for Threatened and Endangered Species habitat within the study area.

Rank 1, Rank 3, and Rank 4 Habitat were identified within 200 feet of the study area. Rank 2 and Rank 5 Habitat were not identified within 200 feet of the study area. (See the text box on the opposite page for definitions of Rank 1-5 Habitat classifications).

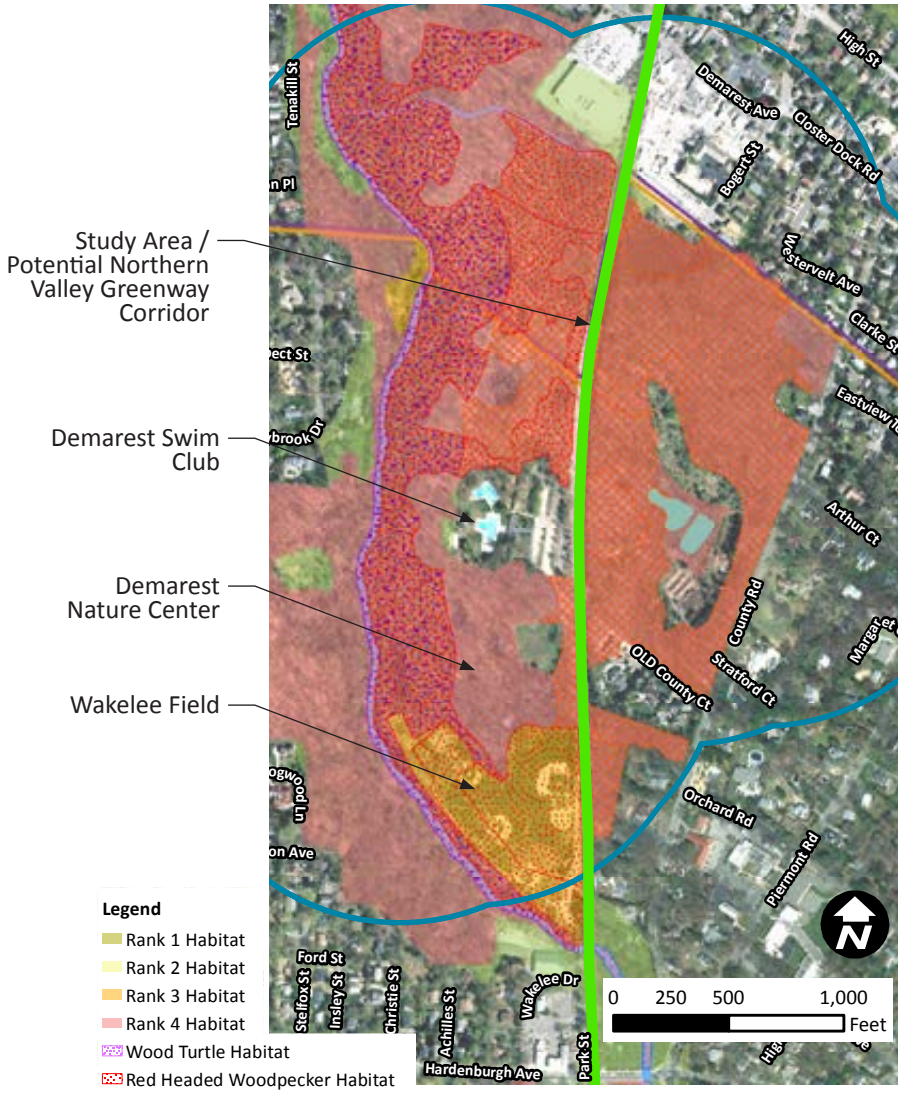
Threatened and Endangered Species habitat identified in the project area include:

- Rank 3 T&E:
  - Wood Turtle
  - Red Headed Woodpecker
  - Black-Crowned Night-Heron
- Rank 4 T&E:
  - Red Shouldered Hawk
  - Bald Eagle

The Landscape Project also identifies Vernal Habitat and Potential Vernal Habitat areas within the project area.

Due to the presence of Rank 3 and Rank 4 species habitat, it is anticipated that a number of wetlands found within the project area may be considered Exceptional Resource Value Wetlands with an associated 150-foot-wide Wetland Transition Area.

Map 3.9: Threatened and Endangered Species near Demarest Nature Center



The area around Demarest Nature Center has a high concentration of T&E habitat.

Landscape Project Habitat Rank Definitions

Rank 1: Habitat Specific Requirements

Rank 1 is assigned to "species-specific habitat patches that meet habitat-specific suitability requirements such as minimum size or core area criteria for endangered, threatened, or special concern wildlife species, but that do not intersect with any confirmed occurrences of such species." These patches without documented occurrences are "not necessarily absent of imperiled or special concern species." Patches with a lack of documented occurrences may not have been systematically surveyed.

Rank 2: Species of Special Concern

Rank 2 is assigned to "species that warrant special attention because of some evidence of decline, inherent vulnerability to environmental deterioration, or habitat modification that would result in their becoming a threatened species". Many Rank 2 species are of regional concern in New Jersey and surrounding states.

Rank 3: State Threatened Species

Rank 3 is assigned to species that are on the New Jersey Threatened Species List. Threatened species are defined as plants and wildlife that will likely "become endangered species if the conditions surrounding them begin or continue to deteriorate." According to the Landscape Project, Rank 3 - State Threatened habitat is "assigned to species-specific patches containing one or more occurrences of State threatened species."

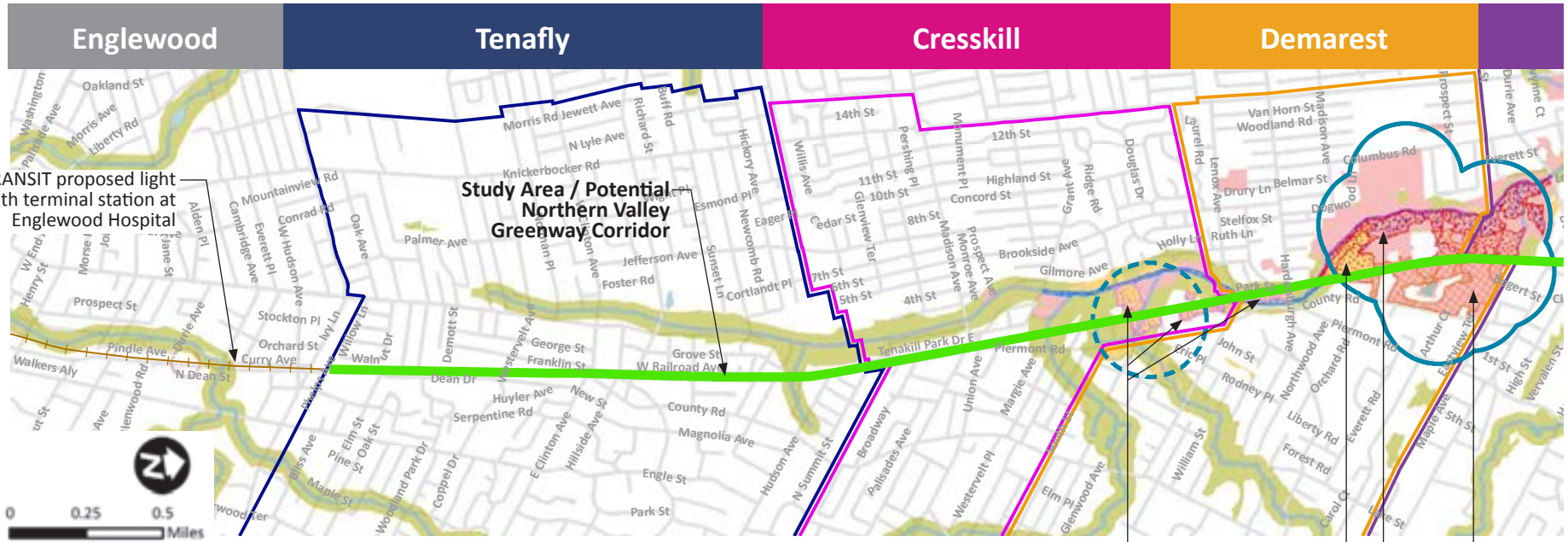
Rank 4: State Endangered Species

Rank 4 is "assigned to species-specific habitat patches within one or more occurrences of State endangered species," according to the Landscape Project. Endangered Species are "those whose prospects for survival in New Jersey are in immediate danger because of a loss or change in habitat, over-exploitation, predation, competition, disease, disturbance or contamination." Assistance is needed to prevent future extinction in New Jersey.

Rank 5: Federally Listed Threatened and Endangered

Rank 5 habitat applies to federally listed threatened or endangered species. These species require federal protection to prevent future loss and potential extinction. Endangered species require immediate action to avoid extinction. Rank 5 is "assigned to species-specific habitat patches containing one or more occurrences of wildlife listed as endangered and threatened pursuant to the Federal Endangered Species Act of 1973."

Map 3.10. Threatened and Endangered Species Habitat



Legend

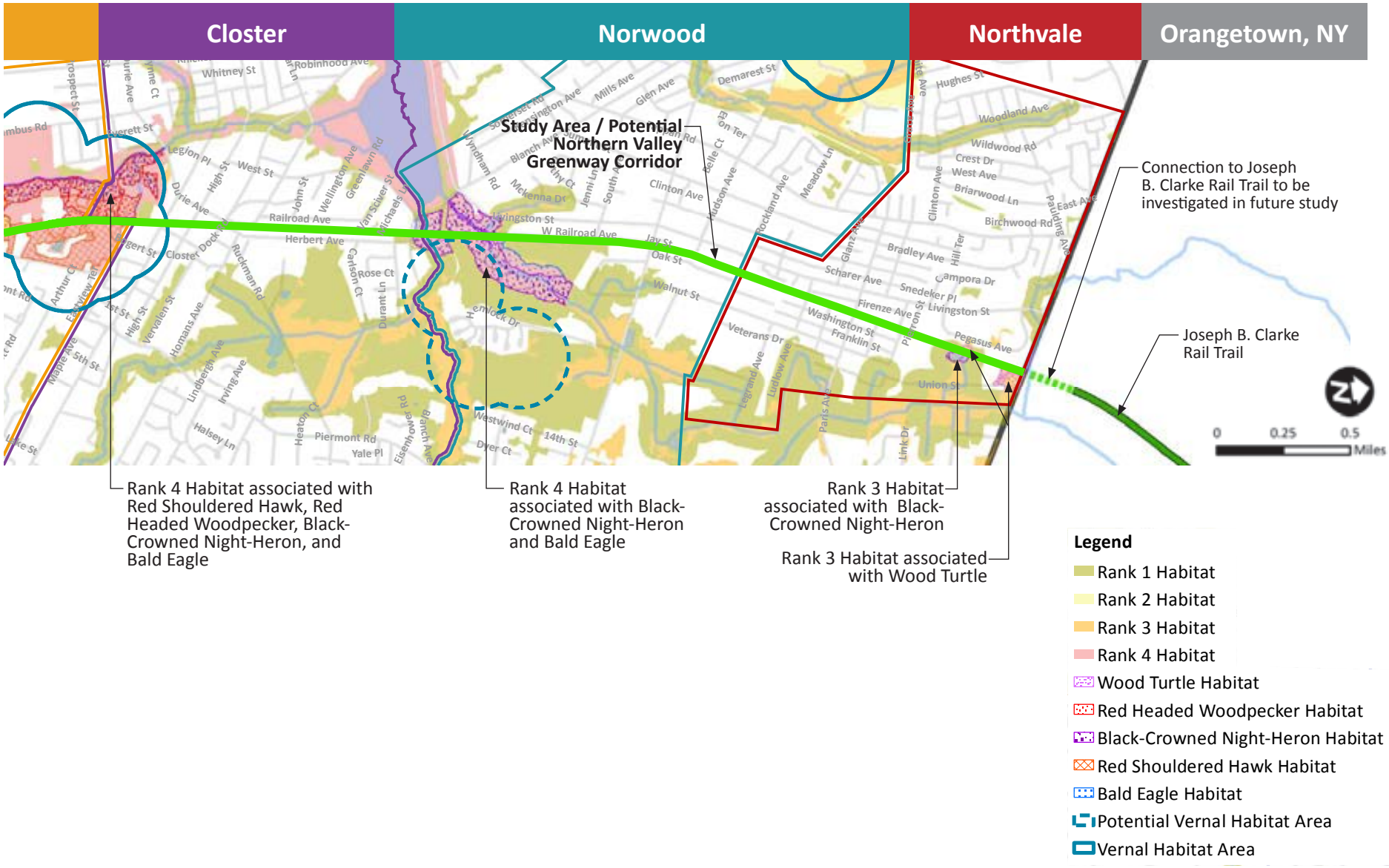
- Rank 1 Habitat
- Rank 2 Habitat
- Rank 3 Habitat
- Rank 4 Habitat
- Wood Turtle Habitat
- Red Headed Woodpecker Habitat
- Black-Crowned Night-Heron Habitat
- Red Shouldered Hawk Habitat
- Bald Eagle Habitat
- Potential Vernal Habitat Area
- Vernal Habitat Area

Rank 3 Habitat associated with Wood Turtle

Rank 3 Habitat associated with Red Headed Woodpecker

Rank 4 Habitat associated with Red Shouldered Hawk, Red Headed Woodpecker, Black-Crowned Night-Heron, and Bald Eagle

Rank 4 Habitat associated with Red Shouldered Hawk


Closter
Norwood
Northvale
Orangetown, NY
Study Area / Potential Northern Valley Greenway Corridor
Connection to Joseph B. Clarke Rail Trail to be investigated in future study
Joseph B. Clarke Rail Trail
0
0.25
0.5
Miles
Rank 4 Habitat associated with Red Shouldered Hawk, Red Headed Woodpecker, Black-Crowned Night-Heron, and Bald Eagle
Rank 4 Habitat associated with Black-Crowned Night-Heron and Bald Eagle
Rank 3 Habitat associated with Black-Crowned Night-Heron
Rank 3 Habitat associated with Wood Turtle
Legend
Rank 1 Habitat
Rank 2 Habitat
Rank 3 Habitat
Rank 4 Habitat
Wood Turtle Habitat
Red Headed Woodpecker Habitat
Black-Crowned Night-Heron Habitat
Red Shouldered Hawk Habitat
Bald Eagle Habitat
Potential Vernal Habitat Area
Vernal Habitat Area

3.8 Environmental Constraints Summary

Based upon the review conducted for this chapter, it is anticipated that there will be environmental constraints to contend with in order to advance the potential Northern Valley Greenway through design and construction. Map 3.11 provides a summary of the principal environmental constraints.

Based on GIS analysis, the Northern Valley Greenway study area traverses environmentally sensitive areas (wetland, floodplain, and riparian zone) over approximately 30% of the 7.4-mile corridor. Note that at GIS analysis for environmental constraints is a starting point for further environmental investigation. This assessment will be refined through future efforts to field verify and delineate environmentally sensitive areas and establish a design approach to minimize impacts.

Based on this assessment, it is anticipated that individual permits will be required through the New Jersey Department of Environmental Protection. This section includes an overview of the individual permits and anticipated agency review times.

Anticipated Environmental Permits / Approvals

Based upon the screening carried out in this chapter, it is anticipated that project advancement for the Northern Valley Greenway would require the following environmental permits/approvals:

NJDEP Freshwater Wetlands Permit (N.J.A.C. 7:7A)

- Required for impacts to freshwater wetlands and/or associated transition areas, and to state open waters
- Transition areas vary from 0 feet for state open waters/ordinary resource value wetlands, to 150 feet for exceptional value wetlands
- Need to show minimization of impacts
- Coordination/Timing restrictions required regarding Threatened and Endangered (T&E) species
- Wetland mitigation will be required (on-site, off-site, via banking, or monetary contribution)

NJDEP Flood Hazard Area Permit (N.J.A.C. 7:13)

- Required for disturbances to watercourses (Floodways / Floodplains and Riparian Zones)
- No fill allowed within a floodway
- Impacts to floodplain areas must be evaluated to show no increase in off-site flood elevations
- Riparian Zones will vary from 50 feet to 300 feet (depending on the presence of environmentally sensitive factors in the watercourse)
- If impacts to riparian zones exceed allowable, mitigation will be required (on-site, off-site or via banking)

NJDEP Stormwater Management (N.J.A.C. 7:8)

- Since this project will meet the definition of “Major Development” (exceeds one acre of disturbance or will generate more than ¼ acre of new impervious coverage), the Statewide SWM rules will apply
- Stormwater Management compliance will be reviewed as part of the FHA-IP Permit

- Stormwater Runoff Quantity, Quality and Groundwater Recharge must be addressed
- Stormwater runoff quantity and groundwater recharge can be addressed with linear infiltration / detention
- Trail construction with porous asphalt can be considered as part of the stormwater management plan / low-impact development technique
- Stormwater runoff quality measures are not required to treat pedestrian-only trails, since there is not increase in pollution

NJDEP NJ Pollution Discharge Elimination System General Permit for Construction Stormwater Discharge (N.J.A.C. 7:14A)

- Required since disturbance will exceed one acre
- Soil erosion and sediment control plan to be prepared to eliminate flow of contaminated rainwater into watercourses

NJDEP New Jersey Historic Preservation Office (N.J.A.C. 7:4)

- Coordination required per the NJ Register of Historic Places Law and, if federal funds are used, Section 106 of the National Historic Preservation Act, due to potential impacts on various historic sites and districts within the project area
- Potential mitigation of impacts may include more detailed studies and/or incorporation of interpretive signage

Bergen County Soil Conservation District

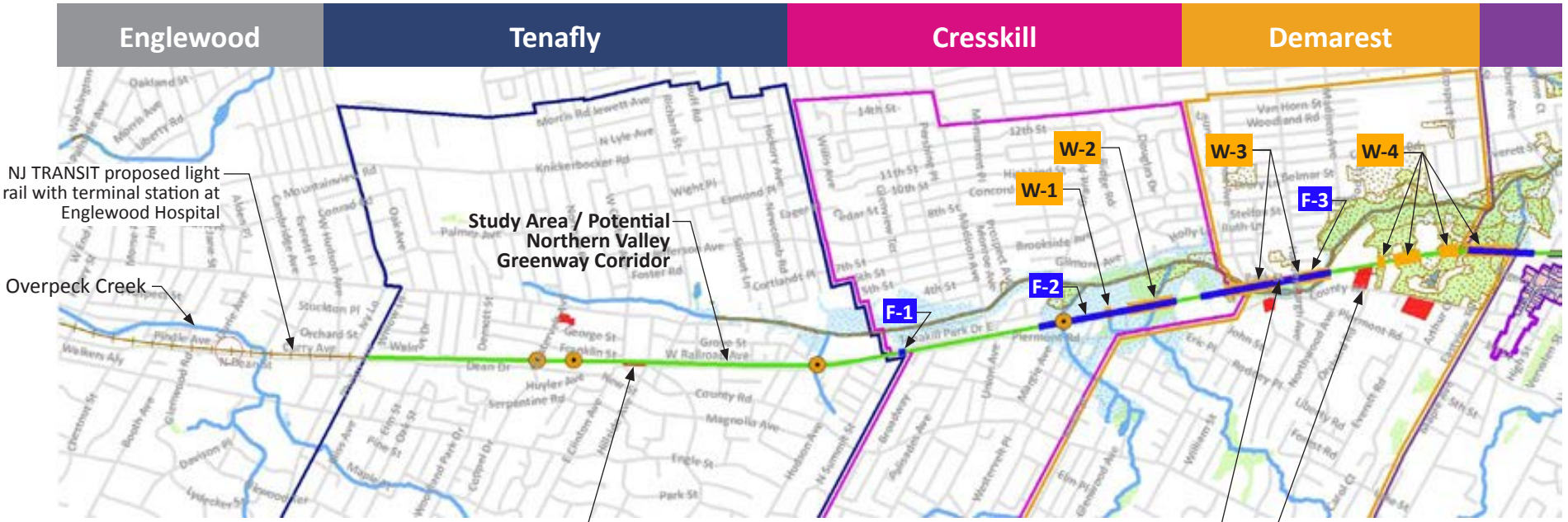
- Soil Erosion and Sediment Control Plan Certification is required since disturbance will exceed 5,000 SF
- Temporary / permanent control measures are required to reduce soil erosion and impacts to off-site areas

Typical Environmental Permitting Timeline

The following table provides the Typical Agency Review Periods for each of the Environmental Permits anticipated for advancement of the project. The review periods listed are typical for each agency and do not include the time that should be planned for the development of the permit submittals. Design plans at 60% complete are required prior to permit submittals.

Environmental Permit	Typical Agency Review Period
NJDEP Freshwater Wetlands Individual Permit (FWW-IP)	6 Months
NJDEP Flood Hazard Area Individual Permit (FHA-IP)	4 to 5 Months
NJDEP Stormwater Management (SWM)	4 to 5 Months
NJDEP NJ Pollution Discharge Elimination System (NJPDES)	1 Month
NJDEP New Jersey Historic Preservation Office (NJHPO)	1 Month
Bergen County Soil Conservation District (BCSCD)	1 to 2 Months

Map 3.11. Environmental/Ecological and Cultural Resources Constraints Map



Legend

- Northern Valley Greenway Study Corridor
- Northern Branch Corridor
- Bridge Structure
- Culvert
- Wetland
- Regulated 100-year floodplain (FEMA)
- Rank 4 Habitat
- Historic District
- HPO Listed
- HPO Eligible
- Impact to Wetland Area
- Impact to Floodplain Area

0 0.25 0.5 Miles

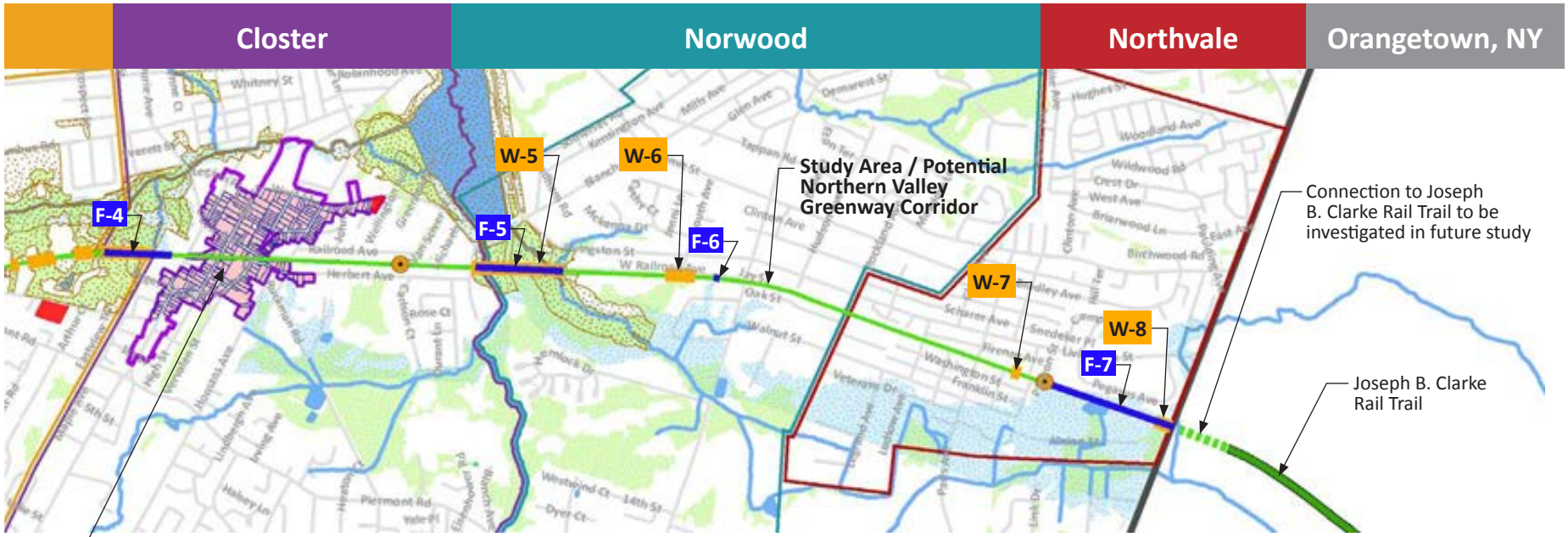
Note: Coordination with New Jersey Historic Preservation Office will be required for listed properties.

Wetland Areas

Freshwater Wetlands have been identified through available GIS resources (without field delineation). Additional study in future phases of design development will be required to determine the exact size (area) and location of impacted areas. NJDEP Freshwater Wetlands will likely be required.

ID	Municipality	Location	Impact Area
W-1	Cresskill	Vicinity of Demarest Brook tributary	± 115 Ft.
W-2	Cresskill	Vicinity of Demarest Brook	± 840 Ft.
W-3	Demarest	Vicinity of Tenakill Brook	± 1,590 Ft.
W-4*	Demarest	Vicinity of Demarest Nature Center	± 1,850 Ft.
W-5*	Norwood	Vicinity of Dwars Kill and Hackensack River tributary	± 1,580 Ft.
W-6	Norwood	Woodlands south of Broadway	± 520 Ft.
W-7	Northvale	South of Willow Ave	± 160 Ft.
W-8	Northvale	South of NJ/NY border	± 300 Ft.

*Note: Rank 4 Habitat has been identified in areas W-4 and W-5 and can be addressed in wetlands permitting. Construction activities will be required to conform to time constraints .



FEMA Floodplain Areas

FEMA Floodplains have been identified through available GIS resources (without field delineation). Additional study in future phases of design development will be required to determine the exact size (area) and location of impacted areas. NJDEP Flood Hazard Area Permits will likely be required.

ID	Municipality	Location	Impact Area
F-1	Cresskill	Northern extent of Tenafly DPW/Recycling Center	± 120 Ft.
F-2	Cresskill	Vicinity of Cresskill High School	± 2,510 Ft.
F-3	Demarest	Vicinity of Demarest Train Station	± 2,367 Ft.
F-4	Demarest/Closter	Wooded area north of Demarest Nature Center	± 1,180 Ft.
F-5	Norwood	Vicinity of Dwars Kill and Hackensack River tributary	± 1,535 Ft.
F-6	Norwood	Woodlands south of Broadway	± 100 Ft.
F-7	Northvale	Pierron Street to NJ/NY border	± 2,380 Ft.

Data Sources

Map 3.1: State Planning / Land Use Areas

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- Municipalities of New Jersey, New Jersey State Plane NAD83, New Jersey Office of Information Technology, Revised/Published July 2016, Accessed July 2018.
- Freight Rail Lines 2012, New Jersey Department of Transportation, Accessed July 2018.
- Base Map: ESRI World Street Map.

Map 3.2: 2010 Census Tract Population

- 2010 TIGER/Line Census Tract Shapefiles for New Jersey and New York, U.S. Census Bureau, Accessed October 2018.
- Freight Rail Lines 2012, New Jersey Department of Transportation, Accessed July 2018.
- Base Map: ESRI World Street Map.

Map 3.3: Demographic Overview Map of Project Area

- Municipalities of New Jersey, New Jersey State Plane NAD83, New Jersey Office of Information Technology, Revised/Published July 2016, Accessed July 2018.
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Map 3.4: Watershed Overview

- 14-digit Hydrologic Unit Watershed Management Areas, New Jersey Department of Environmental Protection, Revised/Published February 2011, Accessed, September 2018.
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- Base Map: ESRI World Street Map.

Maps 3.5.1 - 3.5.2: Cresskill and Norwood Wetland/ Floodplain Areas

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- New Jersey Road Centerlines, New Jersey Office of Information Technology, Accessed July 2018.

Map 3.6: Watercourses, Wetlands, and Floodplain

- New Jersey Land Use/Land Cover 2012 Update, Edition 20150217 Subbasin 02030101 - Lower Hudson, Subbasin 02030103 - Hackensack-Passaic (Land_lu_2012_hu02030101_103) Land Use/ Land Cover 2012, NJ Department of Environmental Protection, Revised/Published February 2015, Accessed July 2018.
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Map 3.7: Green Acres/Section 4(f) Properties

- Open Space and Preservation Resources Inventory (OSPRI) in PAD-US schema, for New Jersey, 2017-10, NJ Office of Information Technology, Published October 2017, Accessed July 2018.
- Green Acres Open Space Database, New Jersey Department of Environmental Protection. ROSI-listed properties downloaded September 2018 and joined to Block/Lot fields in Bergen County Parcel data.
- Historic Properties of New Jersey, Edition 20180924, New Jersey Department of Environmental Protection, Revised/Published September 2018, Accessed November 2018.
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Map 3.8: Contaminated Sites Desktop Screening

- New Jersey Environmental Management System (NJEMS) Sites/ NJDEP Regulated Sites, New Jersey Department of Environmental Protection, Revised/Published November 2018, Accessed November 2018.
- New Jersey Known Contaminated Sites List, New Jersey Department of Environmental Protection, Revised/Published October 2018, Accessed November 2018.
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Map 3.9: Threatened and Endangered Species near Demarest Nature Center

- Species Based Habitat, Piedmont Plains Region, Version 3.3, 20170509 (Landscape Project, including Vernal Habitat), New Jersey Department of Environmental Protection, Revised/Published May 2017, Accessed October 2018.
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Map 3.10: Threatened and Endangered Species Habitat

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- Freight Rail Lines 2012, New Jersey Department of Transportation, Accessed July 2018.
- New Jersey Road Centerlines, New Jersey Office of Information Technology, Accessed July 2018.

Map 3.11: Environmental/Ecological and Cultural Resources Constraints Map

- New Jersey Land Use/Land Cover 2012 Update, Edition 20150217 Subbasin 02030101 - Lower Hudson, Subbasin 02030103 - Hackensack-Passaic (Land_lu_2012_hu02030101_103) Land Use/ Land Cover 2012, NJ Department of Environmental Protection, Revised/Published February 2015, Accessed July 2018.
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CHAPTER

4

Conceptual Alternatives Assessment

Northern Valley Greenway

Technical Planning Assistance Report

June 2019

Chapter 4 Contents

Conceptual Alternatives

Concept A: Greenway & Linear Park

Concept B: Shared Use Path

Concept C: Rail with Trail

4.1 Introduction

The process of converting a railroad corridor into a non-motorized transportation facility is long, complex and will require public involvement; detailed studies to inform permitting and regulatory decisions; design and engineering to address environmental, traffic, safety, and local issues; construction and oversight; and long-term maintenance and management.

It is likely that the process, in full or in part, would be funded through federal sources, thus requiring and engaging the National Environmental Policy Act (NEPA) review process (www.epa.gov/nepa/national-environmental-policy-act-review-process). The NEPA process entails a comparison of alternative solutions in order to ensure that resources are best allocated in consideration of potential environmental impacts.

This chapter presents an overview and assessment of three conceptual alternatives to accommodate a non-motorized travel facility within the Northern Branch Rail Corridor right-of-way (in the study area of Tenafly, Cresskill, Demarest, Closter, Norwood, and Northvale). An overview and assessment map is provided for each conceptual alternative, followed by a comparative assessment among the three alternatives in relation to various design criteria and factors for consideration. A summary matrix is provided at the end of the chapter as a concise record of the alternatives assessment process.

The content of this chapter is modeled on the idea that a comparison of alternative solutions has practical benefits to immediate project planning and advancement, as well as future review processes such as NEPA, New Jersey Department of Environmental Protection permitting, and applications to federal funding sources.

The objective of this chapter is not to determine a preferred design alternative for the Northern Valley Greenway, but to provide useful information that will help the appropriate decision-makers advance a concept through future planning and design processes with necessary and appropriate public input.

Participants discuss Concepts A, B, and C at the Public Information Center held on March 5, 2019.

Benefits of studying alternative solutions include:

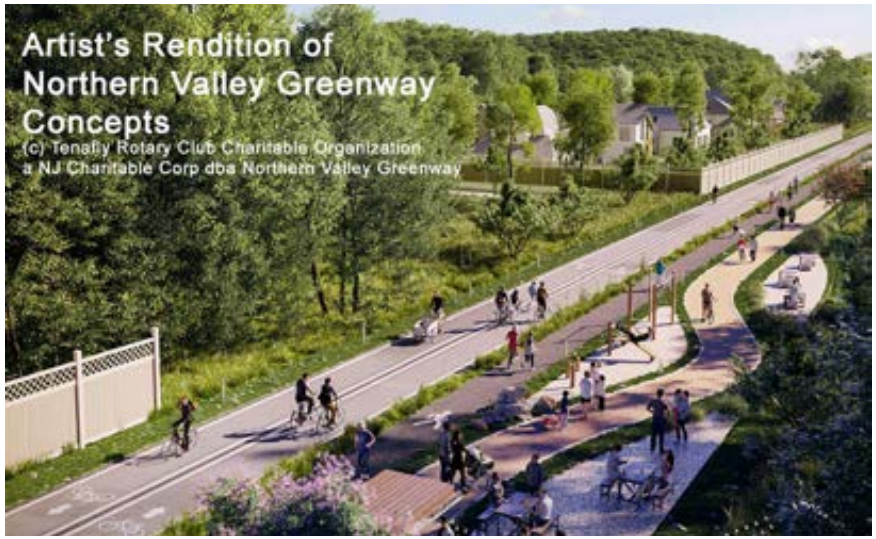
- **Public preference/Participatory process:** By presenting conceptual alternatives at an early stage, there is an opportunity to gauge public preference and create a participatory process before investing in more detailed levels of design.
- **Fact-finding:** By developing and assessing conceptual alternatives, the potential project area is studied and understood from a range of perspectives, which can help to inform future decisions for design and project advancement.
- **Expectation/Iteration:** Design is an iterative process that changes over time as new information and data are gathered and constraints are exposed. Assessment of design possibilities at a conceptual level can reveal new perceptions of design outcomes.

4.2 Overview of Concept A: Greenway & Linear Park

Concept A is the vision developed by the Northern Valley Greenway Committee in consultation with the municipalities, county, and outreach to the public carried out by the Northern Valley Greenway Committee.

Concept A includes:

- Robustly proportioned bicycle and pedestrian facilities to handle the expected heavy user volume from the community and surrounding areas
- Supporting facilities such as space for activity zones, park features, exercise stations, and an emphasis on conservation (e.g. pollinator corridor, low-maintenance native plants)
- Joint strategies with local nature centers, area school systems, local health, wellness, educational and environmental organizations



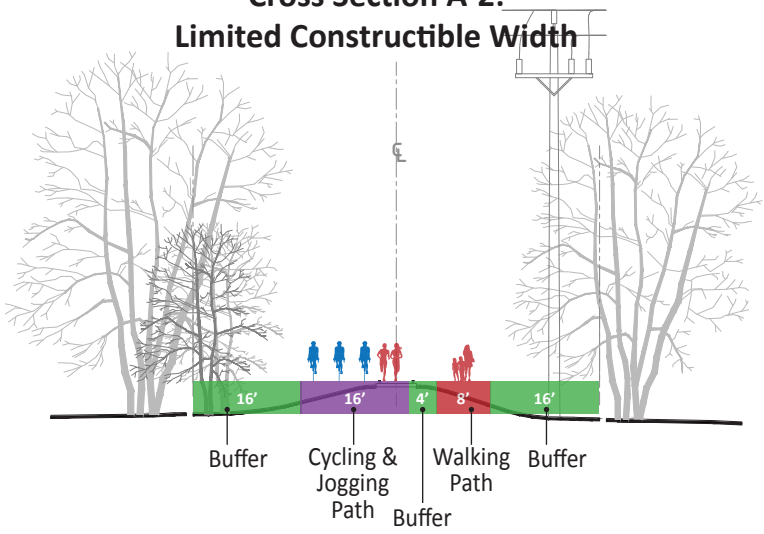
Artist's rendition of the Northern Valley Greenway

Due to variations in conditions along the right-of-way, including wetlands, drainage, side slopes, and development encroachments, the provision and proportion of separated facilities envisioned for walking, jogging, or bicycling vary along the corridor. To suit the varying conditions, Concept A is further divided into Cross Sections A-1, A-2, and A-3.

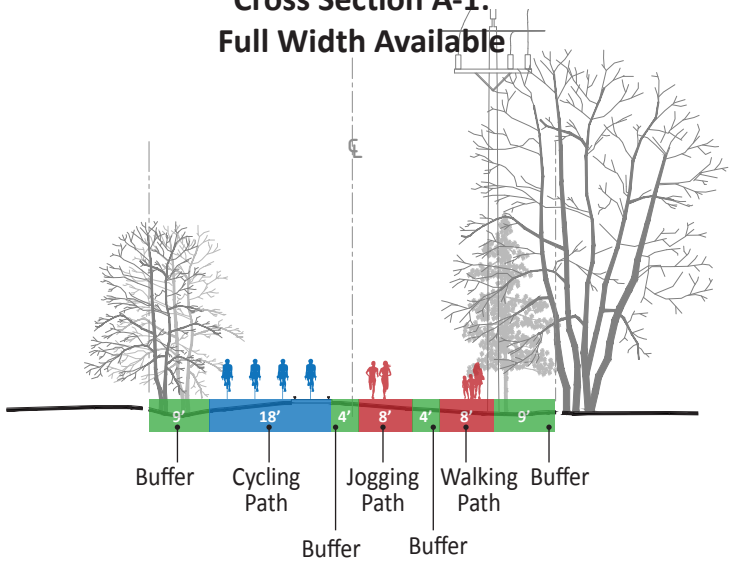
Map #4.1 on the following page indicates the extents along the right-of-way where each of the cross sections is applicable. The map also provides notation to assess the possible outcomes and considerations for the concept related to specific locations along the right-of-way.

Please note that all dimensions are conceptual and have been developed to provide a baseline understanding of the concept for the purpose of comparison among conceptual alternatives.

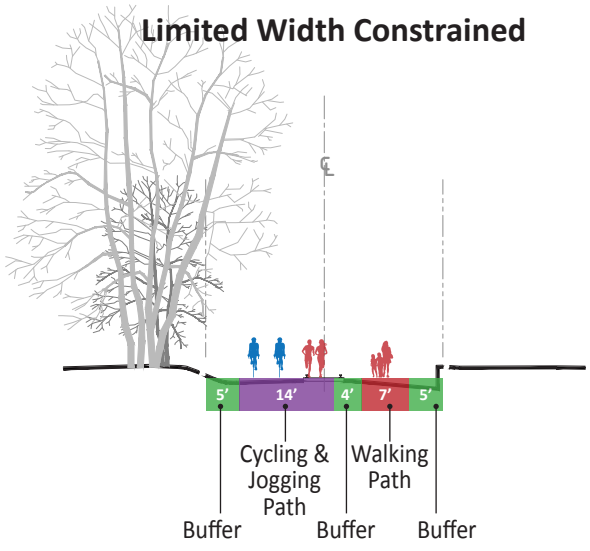
Cross Section A-2:
Limited Constructible Width



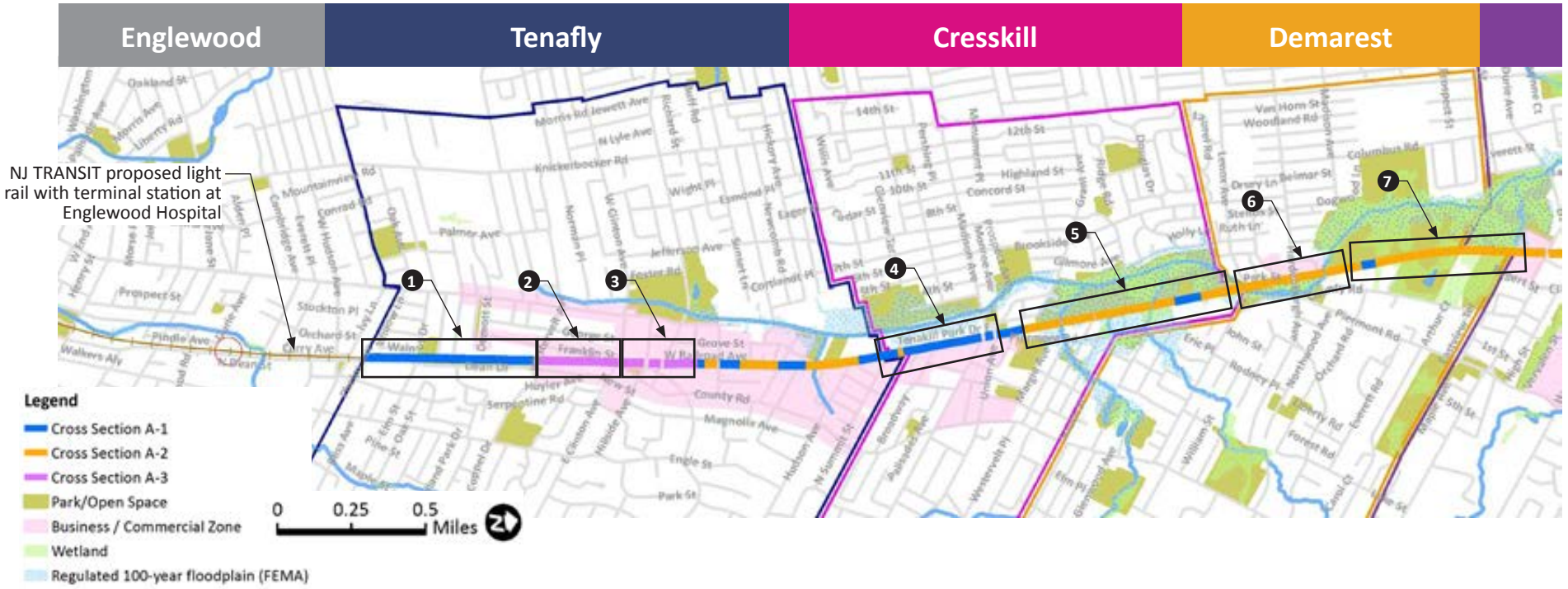
Cross Section A-1:
Full Width Available



Cross Section A-3:
Limited Width Constrained



Map 4.1. Concept A Alignment Assessment Map



1. South of Westervelt Avenue: Opportunity to apply cross section A-1, enhance Dean Park, and connect to Walnut Park.

2. Westervelt Avenue to Clinton Avenue: Constrained width and existing drainage ditch will require reduced cross section (A-3).

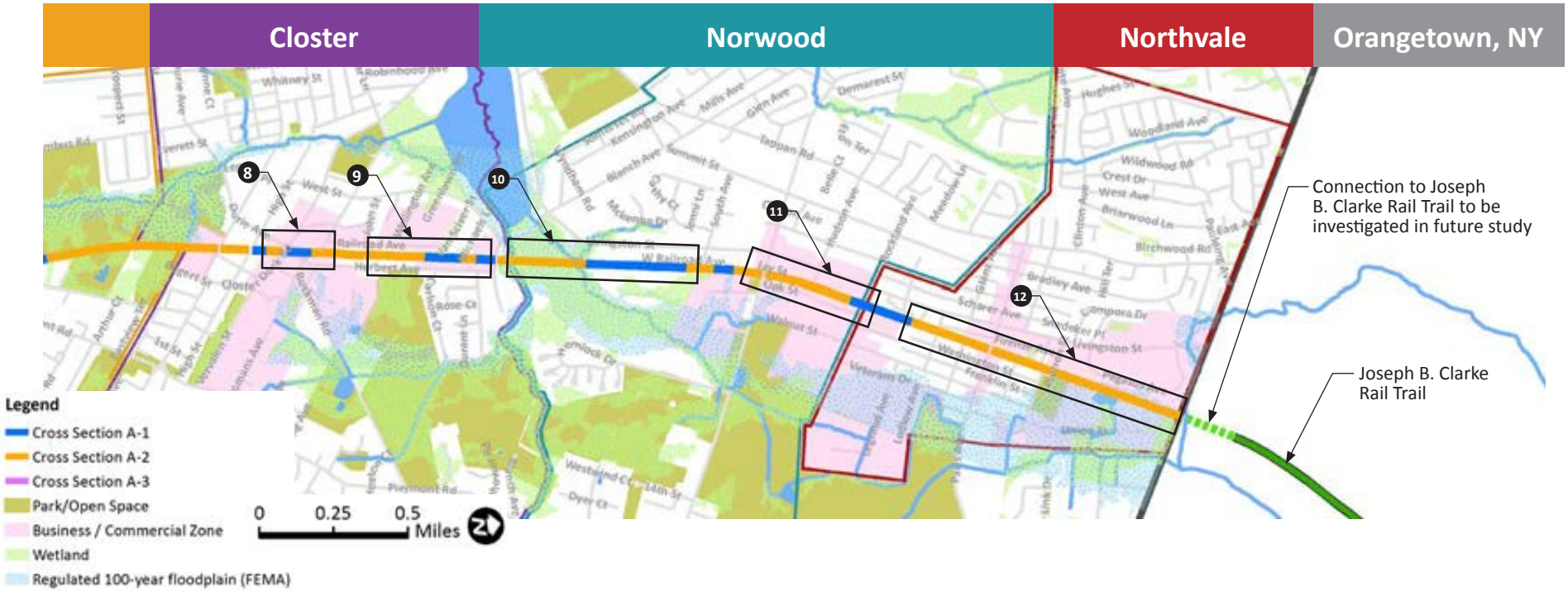
3. Downtown Tenafly: Constrained width will require reduced cross section (A-3). Or, surface parking can be reconceptualized to achieve a signature downtown park that combines Northern Valley Greenway, historic Tenafly Station, and Huyler Park.

4. North Summit Street to Union Avenue: Opportunity to apply cross section A-1 and enhance existing lawn and trees as a linear park with a focal point at the memorials at the former Cresskill Station site.

5. Grant Avenue to Lennox Avenue: Environmentally sensitive area near Cresskill Brook, Demarest Brook, and Cresskill High School will likely require sensitive design treatment to reduce impacts (cross section A-2).

6. Tenakill Brook to Wakelee Field: Opportunity to connect to and enhance parkland surrounding historic Demarest Station and connect to Wakelee Field.

7. Demarest Nature Center: Environmentally sensitive area will likely require sensitive design treatment to reduce impacts (cross section A-2), but can be an ecological highlight of the Northern Valley Greenway.



8 Downtown Closter: Opportunity to achieve a signature downtown park that combines Northern Valley Greenway, historical downtown Closter, and Veterans Park.

9 Closter Commercial/Industrial Area: Opportunity to connect with unique linear business area and capitalize on industrial architecture.

10 Wooded Area and Wetlands east of Oradell Reservoir: Environmentally sensitive areas will likely require sensitive design treatment to reduce impacts (cross section A-2, with possible use of A-1 to the north), but can be an ecological highlight of the Northern Valley Greenway.

11 Norwood Commercial/Business Area: Opportunity to establish link to businesses and provide linear park access from surrounding residential area. This area may require reduced cross section (A-2) to ensure proper stormwater management.

12 Northvale: Opportunity to establish link to businesses and provide linear park access from surrounding residential area. This area will likely require reduced cross section (A-2) to ensure proper stormwater management. There is an opportunity to connect with and enhance John L. Hogan Memorial Park.

4.3 Overview of Concept B: Shared Use Path

Concept B is an alternative that has been developed to assess the impacts and considerations for constructing a basic shared use path in the Northern Branch Rail Corridor.

A shared use path is an off-road facility designed for shared use among pedestrians, bicyclists, and other wheeled users and is designed to meet American Association of State Highway and Transportation Officials (AASHTO) guidelines.

A shared use path includes a single treadway to accommodate a mix of travel speeds and modes among bicyclists, joggers, and pedestrians.

The facility can be designed with future activity zones in mind to be planned and developed independently in the future.

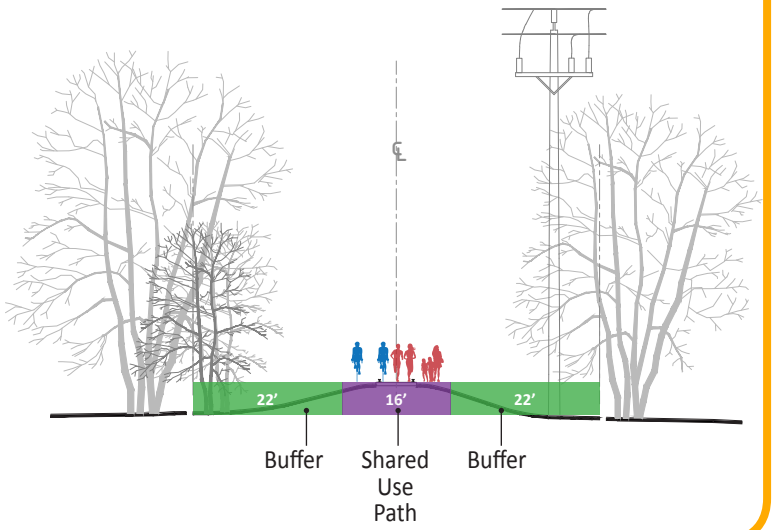
Middlesex Greenway in Woodbridge, New Jersey

Due to variations in conditions along the right-of-way, including wetlands, drainage, side slopes, and development encroachments, the configuration of a shared use path will vary along the corridor. To suit the varying conditions, Concept B is further divided into Cross Sections B-1, B-2, and B-3.

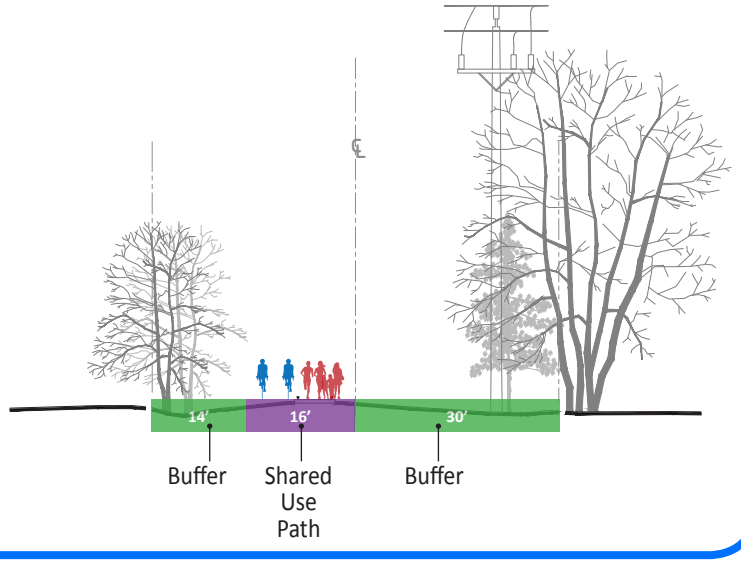
Map #4.2 on the following page indicates the extents along the right-of-way where each of the cross sections is applicable. The map also provides notations to assess the possible outcomes and considerations for the concept related to specific locations along the right-of-way.

Please note that all dimensions are conceptual and have been developed to provide a baseline understanding of the concept for the purpose of comparison among conceptual alternatives.

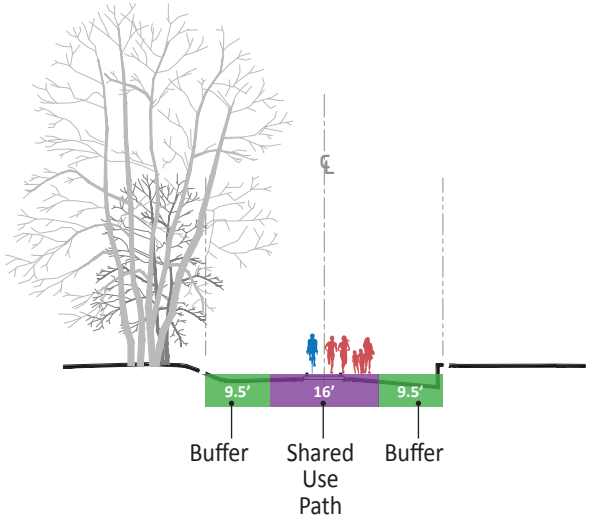
Cross Section B-2:
Limited Constructible Width



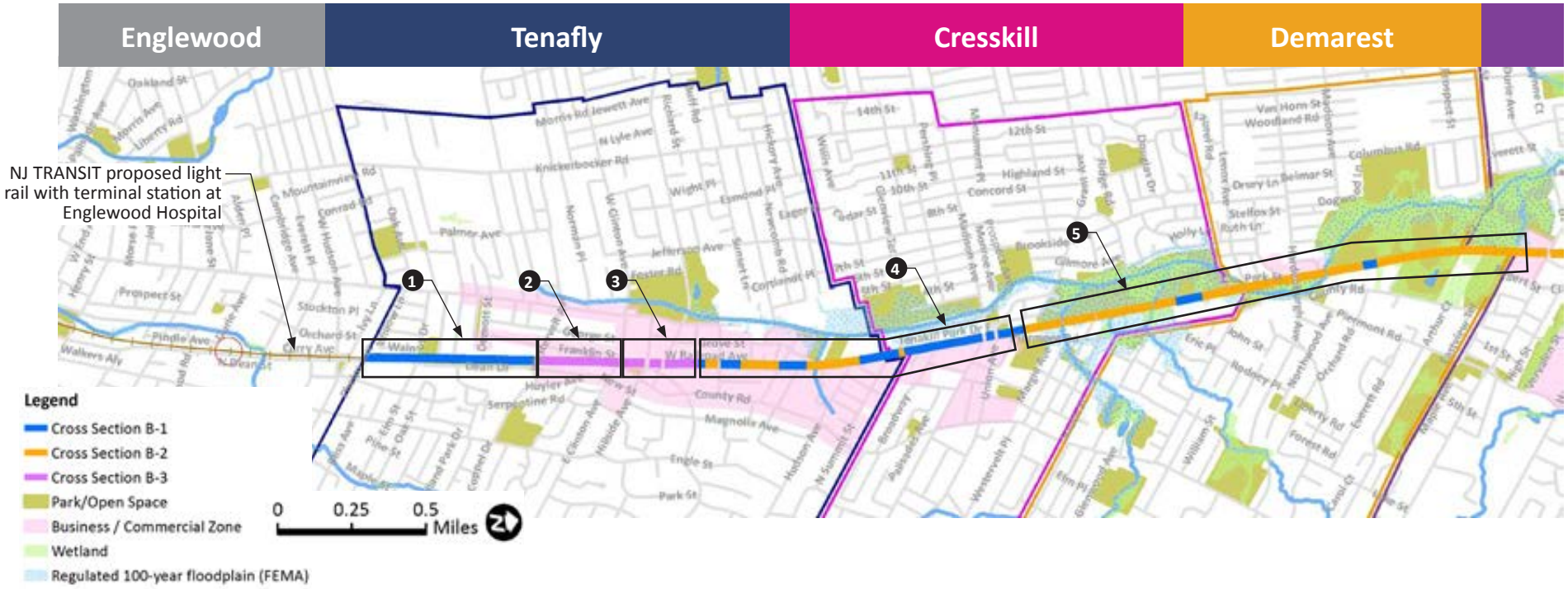
Cross Section B-1:
Full Width Available



Cross Section B-3:
Limited Width Constrained



Map 4.2. Concept B Alignment Assessment Map



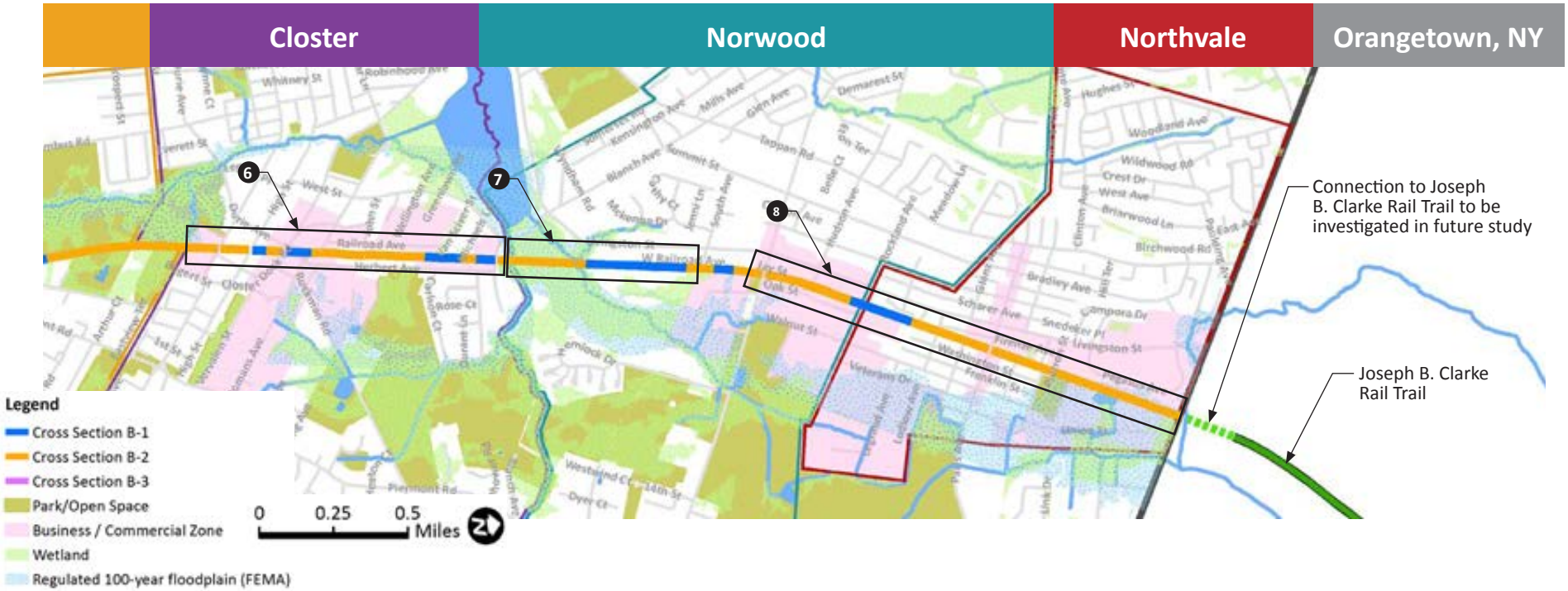
1. South of Westervelt Avenue: Shared use path can potentially replace the railroad and existing informal path adjacent to Dean Park.

2. Westervelt Avenue to Clinton Avenue: Constrained width and existing drainage ditch will require reduced buffer areas but it may be possible to provide a 16' wide shared use path (cross section B-3).

3. Downtown Tenafly: Shared use path can potentially be constructed through constrained downtown area with no change to surface parking (cross section B-3).

4. Downtown Tenafly to Downtown Cresskill: A relatively consistent cross section can be achieved to link residents and businesses between Tenafly Station and the former site of Cresskill Station (±1 mile distance).

5. Grant Avenue to northern border of Demarest: Environmentally sensitive areas near Cresskill Brook, Demarest Brook, Cresskill High School, Demarest Station and Demarest Nature Center will likely require sensitive design treatment to reduce impacts. This is an opportunity for a consistent path to link a series of areas with ecological and scenic value. The paved shared use path can be re-aligned within the right-of-way to reduce or avoid impacts to environmentally sensitive areas.



6 Closter: Opportunity to provide a relatively consistent link to business/commercial and residential areas.

7 Wooded Area and Wetlands east of Oradell Reservoir: Environmentally sensitive areas will likely require sensitive design treatment to reduce impacts. The paved shared use path can be re-aligned within the right-of-way to reduce or avoid impacts to environmentally sensitive areas.

8 Norwood Commercial/Business Area through Northvale: Opportunity to establish a relatively consistent link (±1.5 miles) to business/ commercial areas and surrounding residential areas. Stormwater management will be a key consideration in this area and the paved shared use path can be re-aligned within the right-of-way to reduce or avoid impacts to environmentally sensitive areas.

4.4 Overview of Concept C: Rail with Trail

Concept C has been developed to assess the impacts and considerations of a rail with trail configuration along the right-of-way. In general, Concept C would preserve the existing rail corridor and construct a narrow shared use path within the margins of existing right-of-way.

In comparison to Concepts A and B, the trail facility would be the most narrow, yet would still be required to accommodate varying travel speeds and modes among bicyclists, joggers, and pedestrians.

Due to the space preserved for rail, this concept cannot include activity zones or other park-like features. To suit the varying conditions along the right-of-way (such as wetlands, drainage, side slopes), Concept C is divided into Cross Sections C-1, C-2.A, C-2.B, and C-3.

Map #4.3 on the following page indicates the extents along the right-of-way where each of the cross sections is applicable. The map also provides notations to assess the possible outcomes and considerations for the concept related to specific locations along the right-of-way.

Please note that all dimensions are conceptual and have been developed to provide a baseline understanding of the concept for the purpose of comparison among conceptual alternatives.

Traction Line Trail in Morris Township, New Jersey

Special Note for Concept C

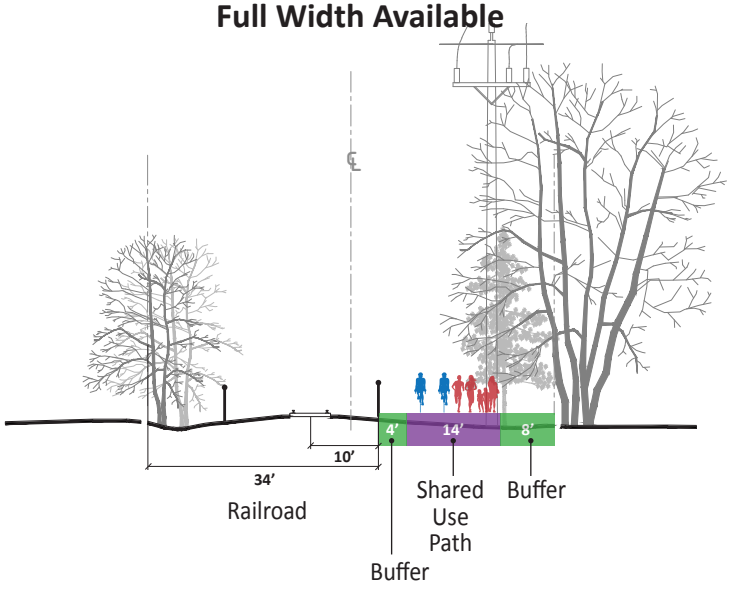
In this assessment of Concept C, only the factors related to the establishment of the trail component are considered. The assessment excludes the consideration of factors and costs related to the future of railroad operations. At this time, it is unclear what parties, if any, would have interest in utilizing the corridor for active rail operations, either for freight or passenger service, in conjunction with a trail.

While a trail can be roughly estimated at $1-2 million[1] per mile, the Hudson-Bergen Light Rail extension project proposed just south of the study area has established a cost estimate of over $128 million[2] per mile. The orders-of-magnitude difference between these costs signifies that any pursuit of a rail with trail concept would necessitate a significant investment of resources well beyond the original impetus for the Northern Valley Greenway as a cost-effective, pedestrian- and bicyclist-oriented facility.

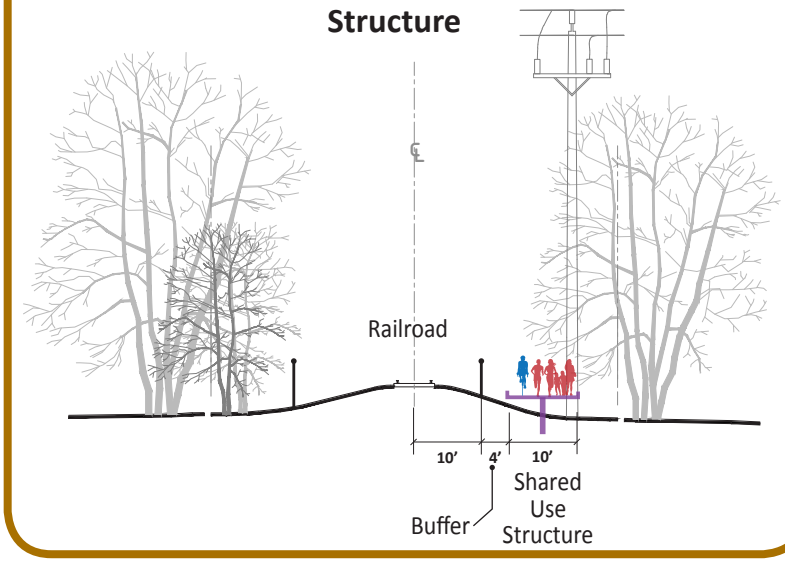
1 Rails-to-Trail Conservancy, http://www.railstotrails.org/resource-library/resources/cross-camden-county-trail-feasibility-plan/

2 *Northern Branch Corridor SDEIS, Executive Summary*, March 2017, page ES-13, Table ES-5.

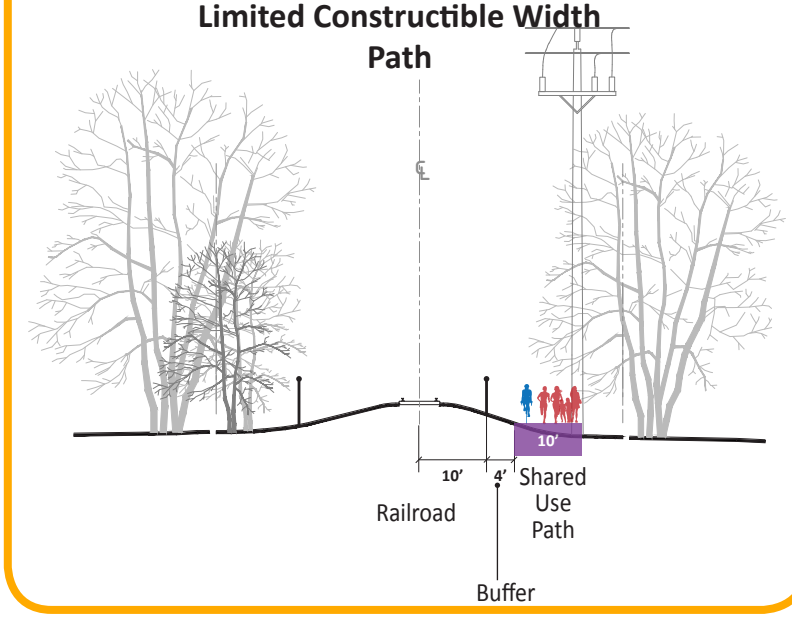
Cross Section C-1: Full Width Available



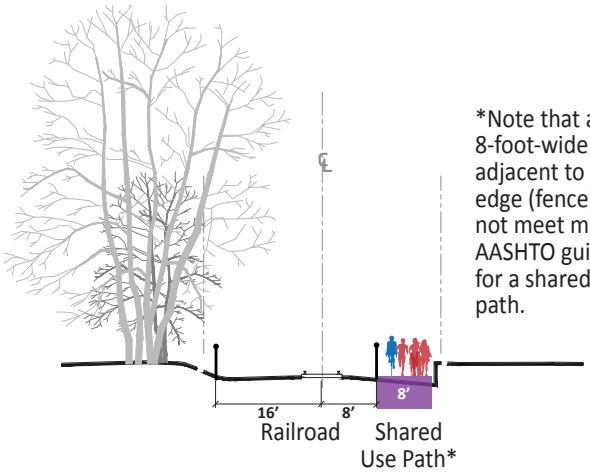
Cross Section C-2.B: Limited Constructible Width Structure



Cross Section C-2.A: Limited Constructible Width Path

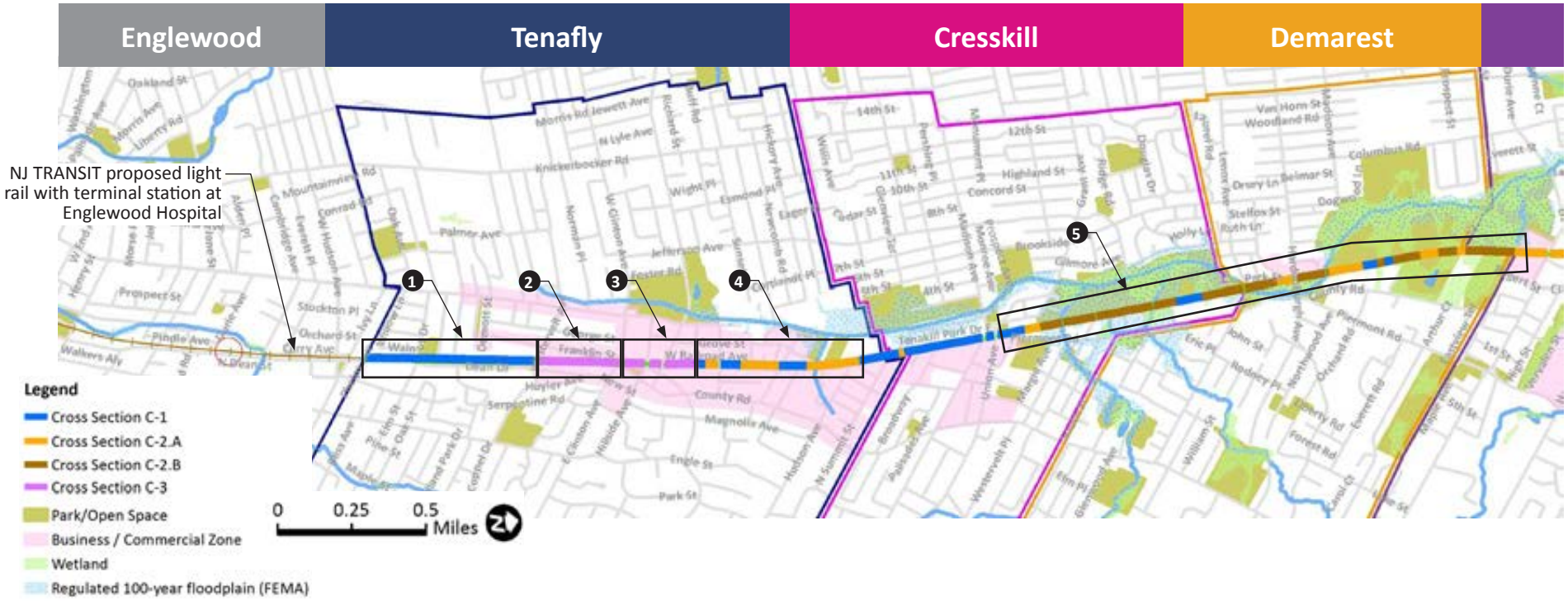


Cross Section C-3: Limited Width Constrained



*Note that an 8-foot-wide path adjacent to a vertical edge (fence) does not meet minimum AASHTO guidelines for a shared use path.

Map 4.3. Concept C Alignment Assessment Map



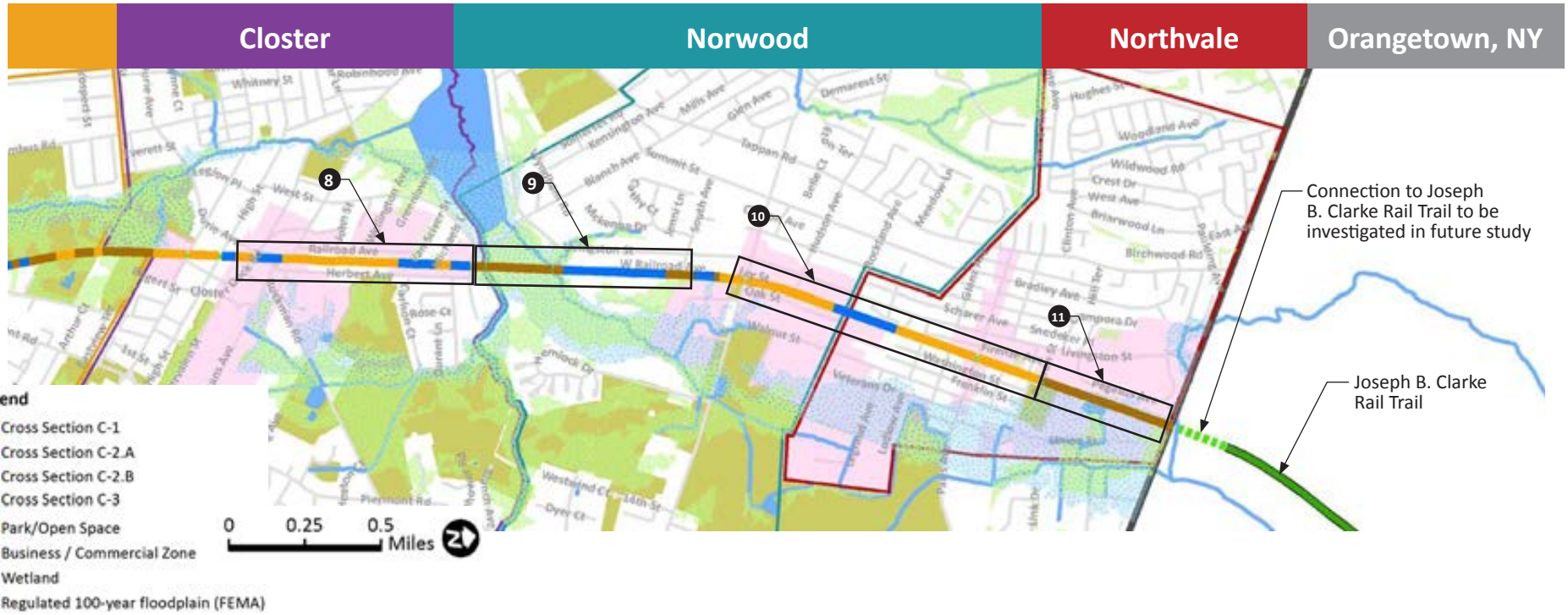
❶ South of Westervelt Avenue: Opportunity to apply cross section C-1 with a shared use path on the west side of existing railroad.

❷ Westervelt Avenue to Clinton Avenue: Constrained width and an existing drainage ditch will require reduced cross section (C-3, poor level of service) or may not be feasible. Pedestrians and bicyclists may be re-routed to on-road facilities.

❸ Downtown Tenafly: Constrained width will require reduced cross section (C-3, poor level of service) or may not be feasible. Pedestrians and bicyclists may be re-routed to on-road facilities.

❹ Downtown Tenafly to North Summit Street: May require a mix of cross sections C-1 and C-2.A, creating an inconsistent facility.

❺ Grant Avenue to northern border of Demarest: Environmentally sensitive areas are near Cresskill Brook, Demarest Brook, Cresskill High School, Demarest Station, and Demarest Nature Center. These areas will likely require extensive deployment of a pier-mounted shared use path structure (cross section C-2.B). In this area, the structure may be required over a combined distance of over 6,100 linear feet. Such structures are expensive and provide a poor level of service due to constrained width.



8 Downtown Closter to Blanch Avenue: With the bicycle and pedestrian facility on the east side of the right-of-way, there is potential for the businesses on that side to be cut off from railroad access. Similarly, bicyclists and pedestrians from the west side of the right-of-way would have difficulty accessing the greenway due to the presence of the railroad.

9 Wooded Area and Wetlands east of Oradell Reservoir: Environmentally sensitive area will likely require deployment of a pier-mounted shared use path structure (cross section C-2.B). In this area, the structure may be required over a combined distance of over 2,100 linear feet. Such structures are expensive and provide a poor level of service due to constrained width.

10 Norwood Business/Commercial Area to Pierron Street in Northvale: With the bicycle and pedestrian facility on the east side of the right-of-way, there is potential for the businesses on that side to be cut off from railroad access. Similarly, bicyclists and pedestrians from the west side of the right-of-way would have difficulty accessing the greenway due to the presence of the railroad.

11 Pierron Street to New Jersey/New York Border: Mapped floodplains will likely require deployment of a pier-mounted shared use path structure (cross section C-2.B). In this area, the structure may be required over a combined distance of over 2,300 linear feet. Such structures are expensive and provide a poor level of service due to constrained width.

4.5 Assessment of Concept Alternatives

Design Criteria and Expectations

The idea for the Northern Valley Greenway was presented by the local initiators to NJDOT as a specific concept:

"The NVG project wants to convert the unused CSX rail line from the southern border of Tenafly to the northern border of Northvale to a linear park with pedestrian paths, jogging and bike trails, attractive seating and possible amenities like dog parks, exercise stations, and sculpture displays. This would result in a roughly 56 acre linear park just under 8 miles long." (https://www.northernvalleygreenway.org/about/, accessed 04/22/2019).

In assessing the concept alternatives from the perspective of design criteria and expectations, it is important to emphasize the priorities of the local initiators. These include:

- Physical separation among bicyclists, pedestrians, and joggers with robust proportions for each facility;
- A linear park with an attractive, high level of finish and numerous amenities;
- An emphasis on safety, high quality aesthetics, and connectivity to local features, such that the greenway itself will be both a route and a destination; and
- Joint strategies with local nature centers, area school systems, and local health, wellness, educational, and environmental organizations.

Understanding that advancement of the Northern Valley Greenway vision will likely require federal funding both in planning/design and in construction, it is vital that the vision be inclusive of the public voice. The following assessment compares the three concept alternatives from the perspective of design criteria and expectations as expressed by the local project initiators and received through public comments associated with a single public meeting.

Concept A: Greenway & Linear Park

- Concept A represents the vision from the Northern Valley Greenway, expressed by the local project initiators, as a high-quality linear park space with separate treadways to accommodate the conflicting travel speeds of pedestrians and bicyclists.
- Concept A has been the general representation for the future of the Northern Branch Rail Corridor in between Tenafly and Northvale espoused by the Northern Valley Greenway volunteer group through the group's website, marketing, and public events.
- Concept A received significant support from members of the public at the Public Information Center conducted for this study, which was attended by 334 people who signed in.

Concept B: Shared Use Path

- Concept B represents a bicycle and pedestrian facility, a shared use path, that is widely used throughout the country as a design treatment for rail-to-trail conversions, through parks and independent rights-of-way, and parallel to roadways.
- Concept B does not meet the criteria for separated pedestrian and bicycle facilities espoused by the project initiators.
- Concept B is mobility-oriented and utilitarian; it does not meet the expectation of the project initiators as a high-quality destination unto itself.
- Concept B received some support from members of the public at the Public Information Center, but significantly less than was expressed for Concept A.

Concept C: Rail with Trail

- Concept C represents a design treatment that utilizes the available right-of-way to provide space for rail operations along with a shared use path to accommodate bicyclists and pedestrians.
- Concept C does not meet the criteria for separated pedestrian and bicycle facilities espoused by the project initiators.
- Concept C is utilitarian; it does not meet the expectation of the project initiators as a destination that will improve local community aesthetics.
- Concept C received a polarizing responses at the Public Information Center. Some members of the public expressed support for preserving railroad as a future transportation option. Others expressed that the railroad is an eyesore and not a viable solution.
- Concept C may require bicyclists and pedestrians to deviate from the right-of-way in constrained areas (see page 133) that cannot safely accommodate shared bicyclist and pedestrian travel.

Safety, Separation of Speeds, and Level of Service

According to the AASHTO *Guide for the Development of Bicycle Facilities* (2012), the design considerations of a shared used path for pedestrians and bicyclists (and other wheeled users) should be driven by the operational characteristics of adult bicyclists (page 5-2). In other words, the space and speed requirements of an adult bicyclist are understood to dictate the width and horizontal alignment of a shared use facility. The typical design speed for an adult bicyclist is 20 MPH.

The Northern Valley Greenway is envisioned by the project initiators as both a route and a destination, meaning it should accommodate through-travel and provide mobility, but it should also provide places to stroll or linger in a park-like setting.

The contrast between a bicyclist traveling 20 MPH, or more, and a park visitor wishing to enjoy natural surroundings creates concerns about safety. To resolve the conflict, the Northern Valley Greenway project initiators envision separate facilities within the right-of-way, as shown in Concept A, to separate greenway users by speed and intent.

Shared Use Path Level of Service is a quantitative measure developed by the Federal Highway Administration to evaluate the operational effectiveness of an existing or planned shared use path, in general terms, based on facility width, anticipated peak user volume, and the mode split among path users (pedestrians, bicyclists, skaters, runners, and others).

Shared Use Path Level of Service calculations do not directly predict safety, but they do predict the extent to which there will be conflict among different modes of travel on a facility. Where conflict can be minimized, it is anticipated that there will be benefits for the safety of all users.

The results of a Shared Use Path Level of Service calculation is a letter grade on a scale of A to F, where A indicates the best level of service (minimal conflict, operation at preferred speeds) and F indicates the worst level of service (most conflict, restricted travel speeds). The Level of Service results for Concepts A, B, and C are provided in this section.

Concept A: Greenway & Linear Park

Shared Use Path Level of Service

Rating of bicycle mobility on a scale of **A** (best) to **F** (worst)

		Peak User Volume (one-way users per hour)		
		100	250	400
Cross Section	A-1	A	A	A
	A-2	A	A	B
	A-3	A	B	C

Definitions (from the Shared Use Path Level of Service Calculator, FHWA, 2006)

A: Excellent. Trail has optimum conditions for individual bicyclists and retains ample space to absorb more users of all modes, while providing a high-quality user experience. Some newly built trails will provide grade-A service until they have been discovered or until their ridership builds up to projected levels.

B: Good. Trail has good bicycling conditions, and retains significant room to absorb more users, while maintaining an ability to provide a high-quality user experience.

Concept B: Shared Use Path

Shared Use Path Level of Service

Rating of bicycle mobility on a scale of A (best) to F (worst)

Cross Section	Peak User Volume (one-way users per hour)		
	100	250	400
B-1	A	C	D
B-2	A	C	D
B-3	A	C	D

Concept C: Rail with Trail

Shared Use Path Level of Service

Rating of bicycle mobility on a scale of A (best) to F (worst)

Cross Section	Peak User Volume (one-way users per hour)		
	100	250	400
C-1	A	C	E
C-2.A	C	F	F
C-2.B	D	F	F
C-3	D	F	F

C: Fair. Trail has at least minimum width to meet current demand and to provide basic service to bicyclists. A modest level of additional capacity is available for bicyclists and skaters; however more pedestrians, runners, or other slow-moving users will begin to diminish LOS for bicyclists.

D: Poor. Trail is nearing its functional capacity given its width, volume, and mode split. Peak period travel speeds are likely to be reduced by levels of crowding. The addition of more users of any mode will result in significant service degradation. Some bicyclists and skaters are likely to adjust their experience expectations or to avoid peak-period use.

E: Very Poor. Given trail width, volume, and user mix, the trail has reached its functional capacity. Peak-period travel speeds are likely to be reduced by levels of crowding. The trail may enjoy strong community support because of its high usage rate; however, many bicyclists and skaters are likely to adjust their experience expectations, or to avoid peak period use.

F: Failing. Trail significantly diminishes the experience for at least one, and most likely for all user groups. It does not effectively serve most bicyclists; significant user conflicts should be expected.

Cost, Constructibility, and Maintenance

According to the Rails-to-Trails Conservancy, the rule of thumb average cost per mile for a trail is $1-2 million.[1]

The vision for the Northern Valley Greenway as both Greenway and Linear Park provides a high level of service and connectivity but requires additional considerations for cost, constructibility, and maintenance.

The primary construction challenges along the corridor involve navigating and constructing the greenway within and around environmentally sensitive areas, as well as grading and drainage associated with stormwater conveyance. Site remediation of contaminated soils due to prior railroad operations is another significant construction challenge that must be investigated and overcome. The costs associated with wetland/riparian mitigation and site remediation are significant and represent two of the biggest cost considerations related to the approach of the greenway.

Maintenance of the greenway after construction is a significant consideration when selecting the alternative for development. Being that the corridor is divided among six municipalities all in support of the project, there is significant support and interest in place to maintain the trail. Ultimately, the eventual owner of the greenway will need to assess and spearhead the maintenance program for the project.

1 Rails-to-Trail Conservancy, http://www.railstotrails.org/resource-library/resources/cross-camden-county-trail-feasibility-plan/

Concept A: Greenway & Linear Park

Cost

Highest

This alternative is relatively expensive due in part to its larger footprint and increased use of space within right-of-way. Environmental remediation and mitigation costs are significantly higher in this scenario, as are trail facility construction costs including a more complicated approach to stormwater design due to multiple treadways for bicycling, jogging, and walking.

Constructibility

Medium Layout Flexibility

The layout of the separate treadways can be altered within the right-of-way to accommodate constrained or environmentally sensitive areas and minimize costs. Some sacrifice may be necessary to full build-out intent.

Medium Level of Difficulty

Design and construction of the separate treadways with park elements will require significant time and effort to engineer, build, and manage.

Maintenance

Highest

Separate treadway design, amenities, and high level of finish will require additional staff, level of effort, and cost to maintain the greenway.

Concept B: Shared Use Path

Cost

Lowest

This alternative is the most cost effective of the three alternatives. The construction of a shared use path (single treadway) minimizes the impact to environmentally sensitive areas and level of effort associated with potential site remediation from previous railroad operations.

Constructibility

Highest Layout Flexibility

Single treadway is simple in approach and can easily be realigned or altered in constrained or environmentally sensitive areas to minimize costs.

Lowest Level of Difficulty

This alternative offers a lower level of design and construction effort than the other two alternatives.

Maintenance

Lowest

Single treadway and less intensive approach to amenities will reduce the level of effort and cost to maintain the greenway.

Concept C: Rail with Trail

Cost

Highest

This alternative is relatively expensive due to a significant portion of the greenway having to be constructed as a boardwalk through environmentally sensitive areas. (Note that costs associated with railroad facilities are not considered in this assessment).

Constructibility

Lowest Layout Flexibility

The treadway is limited to the area not being used by rail operations. Where environmentally sensitive areas exist along the corridor, this will require expensive construction methods or re-routing of the greenway.

Highest Level of Difficulty

The primary objective would be to restore and maintain a functional railroad with a bicycle/pedestrian path fit into remaining space.

Maintenance

Medium

Single treadway with limited amenities will reduce the level of effort and cost to maintain. However, extensive use of boardwalk will require additional maintenance. Any potential railroad operator would be responsible for the active rail portion of the right-of-way in this concept.

ADA Accessibility and Connectivity

ADA Accessibility

The United States Access Board publishes standards to ensure that the built environment is accessible to people of all physical abilities in accordance with the Americans with Disabilities Act (ADA) in the *Proposed Guidelines for Pedestrian Facilities in the Public Right-of-Way* (PROWAG, 2011). The following guidance for ADA accessibility is derived from PROWAG and supplemental notices, along with the AASHTO *Guide for the Development of Bicycle Facilities* (2012):

Clear Width: The minimum clear width for a pedestrian access route should be 60" (or 48" with passing spaces less than 200' apart). For a shared use path, the pedestrian access route shall be provided for the full operational width of the facility.

Cross Slope: The cross slope of a shared use path is not to exceed 2%.

Running Slope: The running slope of a shared use path in an independent right-of-way is not to exceed 5%.

This section provides an assessment of Concepts A, B, and C as they relate to ADA accessibility.

Connectivity

Connectivity is the quality of a transportation facility to reach destinations, increase travel route options, and increase travel mode options, especially for non-vehicular travel. According to the U.S. Department of Transportation, "Well-connected, multimodal networks are characterized by seamless bicycle and pedestrian infrastructure, direct routing, accessibility, few dead-ends, and few physical barriers" (https://www.transportation.gov/mission/health/promoting-connectivity).

This section provides an assessment of Concepts A, B, and C as they relate to connectivity.

Concept A: Greenway & Linear Park

ADA Accessibility

- Existing right-of-way slope and width are optimal for creation of ADA-accessible pedestrian facilities in Concept A
- Detailed design should ensure that all surfaces for pedestrian travel are firm and stable

Connectivity

- Linear park concept creates off-road facility to improve non-vehicular travel options and connectivity on both sides of the right-of-way
- Separate travel paths for bicyclists, joggers, and pedestrians create the best range of mode options, minimize conflict, and optimally meets the distinct needs of travel modes
- Separate travel paths create safe options for a range of bicycling speeds while minimizing potential conflict with pedestrians or slower bicyclists
- Linear park concept maximizes potential to provide seamless transitions between the off-road travel facility and destinations such as downtowns, parks, and schools along the right-of-way

Concept B: Shared Use Path

ADA Accessibility

- Existing right-of-way slope and width are optimal for creation of ADA-accessible pedestrian facilities in Concept B

Connectivity

- Shared use path concept creates off-road facility to improve non-vehicular travel options and connectivity on both sides of the right-of-way
- Shared use path provides off-road travel option for bicyclists, joggers, and pedestrians, but does not optimally meet the distinct needs of each type of traveler

Concept C: Rail with Trail

ADA Accessibility

- Existing right-of-way slope and width are optimal for creation of ADA-accessible pedestrian facilities in Concept C

Connectivity

- Rail with trail concept creates off-road facility to improve non-vehicular travel options
- Physical barriers (such as fence) are recommended for rail with trail to define the pedestrian and bicyclist travel space within the right-of-way
- Use of physical barriers along with railroad creates an impermeable area that prevents mid-block connectivity across the right-of-way
- Rail with trail concept fails to provide connectivity on both sides of the right-of-way and is isolated to only one side of the right-of-way

Substandard Design Elements / Design Exceptions

Substandard design elements are existing features or structures on or along a roadway that do not meet current design standards. In a typical roadway design project, "controlling substandard design elements" (CSDEs) are identified during the preliminary engineering design phase. They include measurable factors such as sight distance, lane width, or curve radius (among others) in relation to design standards for a given roadway classification and design speed. Where CSDEs are present, a Design Exception process exists, wherein design exceptions can be submitted to the Federal Highway Administration for approval. (NJDOT *Design Exception Manual*, 2012).

Processes to design an off-road greenway facility do not include the same level of scrutiny and approval as roadway projects. For greenway design, guidelines such as the AASHTO *Guide for the Development of Bicycle Facilities* (2012) should be used as a reference during design development to inform decisions related to width, lateral clearance, and horizontal or vertical curves. However, it is important to note that a Design Exception process does not exist for greenway facilities; therefore, deviation from minimum design guidelines can create a liability issue for greenway owners.

For the Northern Valley Greenway, Concepts A, B, and C have been assessed for their general ability to meet or exceed the minimum design standards for shared use facilities in the AASHTO *Guide for the Development of Bicycle Facilities.* (Note: A revised version of the guide is in development expected to be published in 2019 or 2020).

The following section summarizes how well each concept can conform to AASHTO guidelines.

Concept A: Greenway & Linear Park

AASHTO Minimum Width for Two-Directional Shared Use Path	10 feet

Concept:		Conformance:
Concept A-1 Width:	18 feet	Exceeds AASHTO Minimum
Concept A-2 Width:	16 feet	Exceeds AASHTO Minimum
Concept A-3 Width:	14 feet	Exceeds AASHTO Minimum

Concept A and variations A-1, A-2, and A-3 exceed minimum operating width recommendations in the AASHTO *Guide for the Development of Bicycle Facilities* (2012).

Concept A further exceeds the AASHTO guidelines by providing separate facilities for bicyclists and pedestrians.

Concept B: Shared Use Path

AASHTO Minimum Width for Two-Directional Shared Use Path	10 feet

Concept:		Conformance:
Concept B-1 Width:	16 feet	Exceeds AASHTO Minimum
Concept B-2 Width:	16 feet	Exceeds AASHTO Minimum
Concept B-3 Width:	16 feet	Exceeds AASHTO Minimum

Concept B and variations B-1, B-2, and B-3 exceed minimum operating width recommendations in the AASHTO *Guide for the Development of Bicycle Facilities* (2012).

Concept C: Rail with Trail

AASHTO Minimum Width for Two-Directional Shared Use Path	10 feet
AASHTO Minimum Width for Constrained Areas	8 feet
AASHTO Minimum Width where railings are present	10 feet

Concept:		Conformance:
Concept C-1 Width:	14 feet	Exceeds AASHTO Minimum
Concept C-2.A Width:	10 feet	Meets AASHTO Minimum
Concept C-2.B Width:	10-foot deck/8-foot treadway	Meets AASHTO Minimum for Constrained Areas
Concept C-3 Width:	8-foot treadway with vertical edges	Does not meet AASHTO Minimum for Constrained Areas

Variations C-1 and C-2.A meet or exceed minimum guidelines in the AASHTO *Guide for the Development of Bicycle Facilities* (2012).

Variation C-2.B complies with minimum guidelines constrained areas. However, C-2.B covers roughly one third of the study area, and the minimum guidelines for constrained areas are advised only for "rare circumstances" or "for a short distance due to a physical constraint, such as an environmental feature, bridge abutment, utility structure, fence, and such." (AASHTO, page 5-3).

Variation C-3 provides for an 8-foot treadway, but would be located directly adjacent to a vertical edge (fence). This configuration fails to meet the minimum guidelines because it does not account for "shy distance" when a path is adjacent to a vertical edge.

Environmental Permitting

Based upon the preliminary screening previously done for this project, approximately 30% of the potential greenway lies within environmentally sensitive areas. Several required permits/approvals have been identified along with anticipated review periods for each submittal. See *Chapter 3: Environmental Review* for additional permit information.

It is anticipated that permitting will be required regardless of the greenway alternative selected. However, for purposes of comparison, some environmental permit requirements such as the mitigation of wetlands and riparian impacts are very costly and deserve consideration early in the design process. Mitigation requires purchase of off-site wetlands or riparian areas to offset proposed development within these areas by the project. Wetland and riparian mitigation costs can be estimated at $700,000 per acre.

Environmental site remediation of existing contaminants within the right-of-way due to previous railroad operations is another potentially expensive responsibility. The extent of this effort is unknown at this time and the eventual owner of the greenway project will have to address this at the time of purchase from the railroad. Remediation effort and cost will depend upon the level of contaminants found and the approach decided upon for remediation. For example, a less expensive approach depending upon contamination levels discovered would be to remediate key areas of the project area and deed restrict/deny access to areas not critical to the project.

Costs associated with these environmental impacts will be largely dependent upon the greenway alternative development footprint.

Concept A: Greenway & Linear Park

Permits/Approvals

Required

- NJDEP Freshwater Wetlands Permit (N.J.A.C. 7:7A)
- NJDEP Flood Hazard Area Permit (N.J.A.C. 7:13)
- NJDEP Stormwater Management (N.J.A.C. 7:8)
- NJDEP NJ Pollution Discharge Elimination System General
- Permit for Construction Stormwater Discharge (N.J.A.C. 7:14A)
- NJDEP New Jersey Historic Preservation Office (N.J.A.C. 7:4)
- Bergen County Soil Conservation District

Potential Wetland / Riparian Impacts

Highest

Wetland: ± 4 acres

Riparian: ± 4 acres

Potential Site Remediation Effort

Highest

The Greenway & Linear Park design approach will require the highest level of cleanup based upon the intent that the entire right-of-way is meant to be a 'public park' and incorporated within the design of the project.

Concept B: Shared Use Path

Permits/Approvals

Required

- NJDEP Freshwater Wetlands Permit (N.J.A.C. 7:7A)
- NJDEP Flood Hazard Area Permit (N.J.A.C. 7:13)
- NJDEP Stormwater Management (N.J.A.C. 7:8)
- NJDEP NJ Pollution Discharge Elimination System General
- Permit for Construction Stormwater Discharge (N.J.A.C. 7:14A)
- NJDEP New Jersey Historic Preservation Office (N.J.A.C. 7:4)
- Bergen County Soil Conservation District

Potential Wetland / Riparian Impacts

Medium

Wetland: ± 2 acres

Riparian: ± 3 acres

Potential Site Remediation Effort

Medium

The remediation effort for a single, shared use path design is less intensive in that remediation could be limited to a short distance adjacent to each side of the trail allowing for proper clear zones and minimal landscaping. The greenway pavement will provide a cap for any contamination directly beneath the trail. Remediation of the remainder of the right-of-way could be performed to a different standard depending upon the activities anticipated for these areas.

Concept C: Rail with Trail

Permits/Approvals

Required

- NJDEP Freshwater Wetlands Permit (N.J.A.C. 7:7A)
- NJDEP Flood Hazard Area Permit (N.J.A.C. 7:13)
- NJDEP Stormwater Management (N.J.A.C. 7:8)
- NJDEP NJ Pollution Discharge Elimination System General
- Permit for Construction Stormwater Discharge (N.J.A.C. 7:14A)
- NJDEP New Jersey Historic Preservation Office (N.J.A.C. 7:4)
- Bergen County Soil Conservation District

Potential Wetland / Riparian Impacts

Lowest

Wetland: ± 2 acres

Riparian: ± 2 acres

Potential Site Remediation Effort

Lowest

Remediation level of effort for this approach is considered low due the limited area required to be remediated. Since the rail operation will occupy the majority of the right-of-way, the greenway remediation area is limited. Additionally, the installed greenway pavement will provide a cap for any contamination directly beneath the trail.

Bridge and Culvert Structures

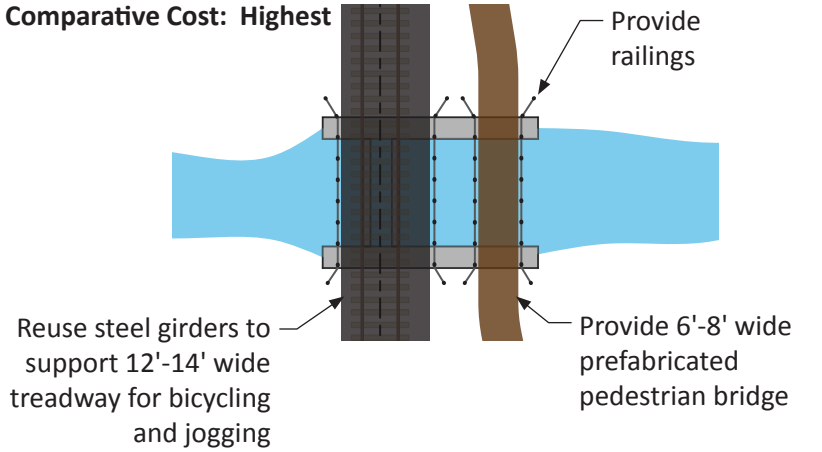
A total of 12 bridge or culvert structures have been identified along the Northern Valley Greenway study area corridor from Tenafly to Northvale. The bridges and culverts are located within the railroad right-of-way, and therefore it is assumed that these structures are owned and maintained by the property owner. A detailed inspection of all structures should be conducted in advance of further design consideration.

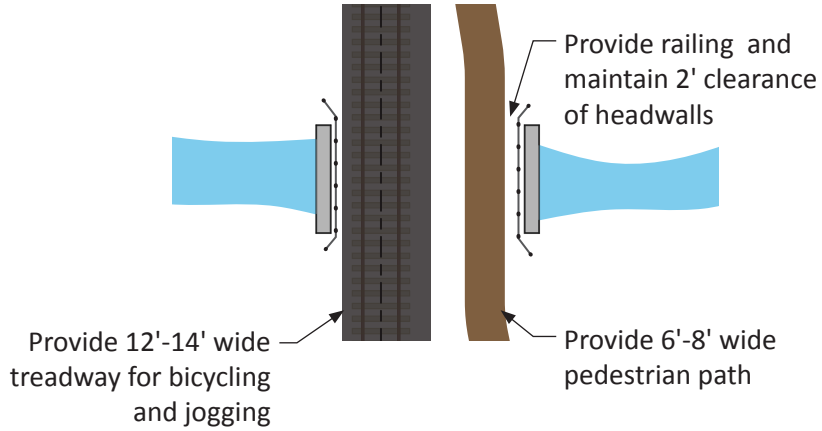
There are 6 steel girder railroad bridges on concrete abutments. The existing abutments range in width from ±30' to ±40' and existing rail is aligned to the western portion of each.

There are 6 culvert structures. They range in width from ±27' to ±60' and the existing rail is aligned to the western portion of each.

Where possible, the reuse and incorporation of the existing structural components of bridges and culverts will benefit the Northern Valley Greenway in terms of cost savings. A more detailed, engineering-level evaluation of each structure should be carried out as a component of future design advancement.

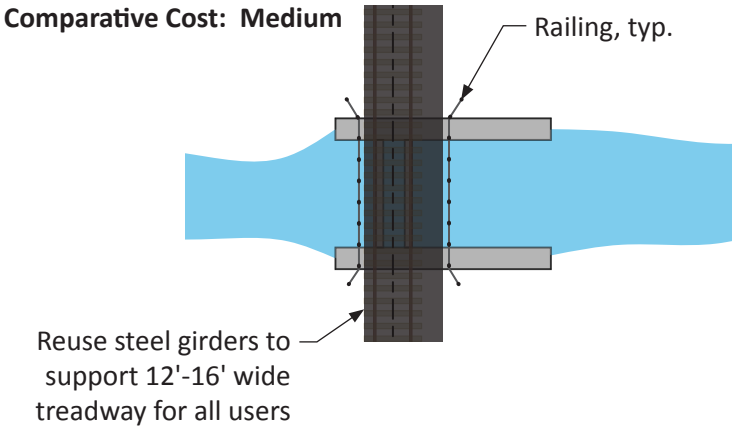
Concept A: Greenway & Linear Park

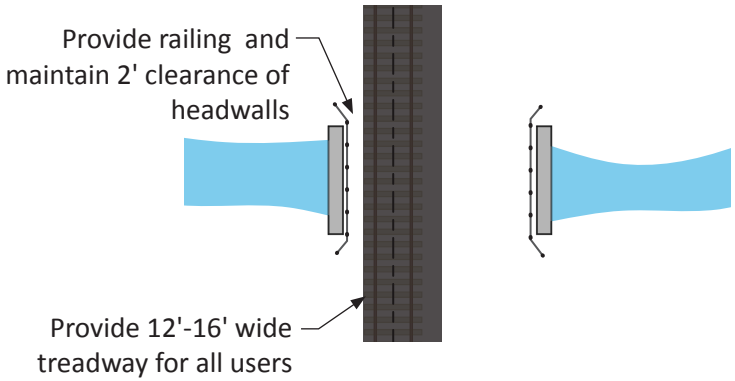




Concept B: Shared Use Path

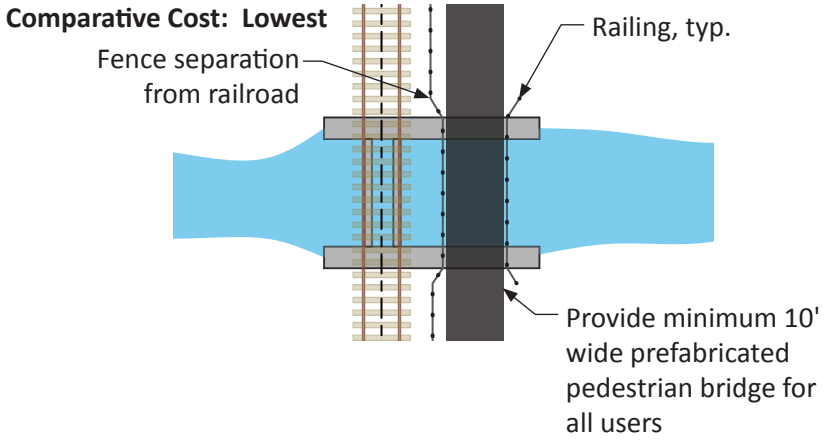
Comparative Cost: Medium

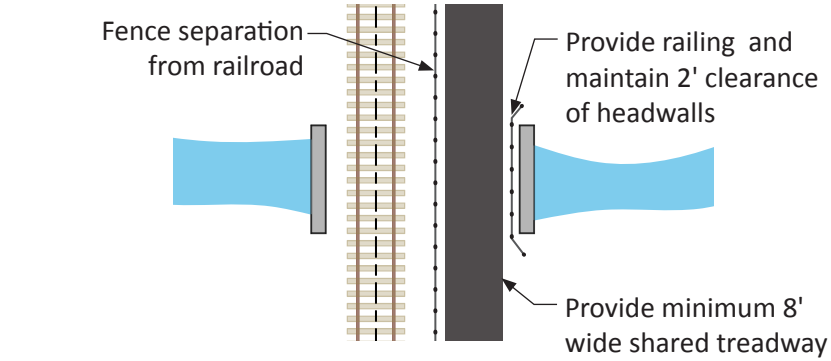




Concept C: Rail with Trail

Comparative Cost: Lowest





4.6 Assessment Summary Matrix

	 **Concept A: Greenway & Linear Park**	 **Concept B: Shared Use Path**	 **Concept C: Rail with Trail**
Design Criteria and Expectations	• Vision expressed by Northern Valley Greenway Committee with public outreach • Separate treadways for pedestrians and wheeled users • Includes park features and furnishings	• Common design • Mobility-oriented • Park considerations in future	• Utilitarian • No space for park considerations
Safety	Best	Acceptable	Does not meet minimum AASHTO guidelines in highly constrained areas (may require on-road alternatives)
Separation of Speeds among path users	Physical separation by mode	No physical separation	No physical separation
Level of Service	Highest	Medium	Lowest
Cost	Highest	Lowest	Highest
Constructibility: Layout Flexibility	Medium	Highest	Lowest
Constructibility: Level of Difficulty	Medium	Lowest	Highest
Maintenance	Highest	Lowest	Medium
ADA Accessibility	No issues anticipated	No issues anticipated	No issues anticipated
Connectivity	Best, most appeal for users of all ages, abilities, and intents	Very good	Poor - creates a barrier that prevents movement across the right-of-way
Substandard Design Elements	None anticipated	None anticipated	• AASHTO minimum width for constrained areas over a third of the project area • Highly constrained areas may require on-road alternatives
Permits/Approvals	NJDEP Individual Permits	NJDEP Individual Permits	NJDEP Individual Permits
Potential Wetland/Riparian Impacts	Highest (Wetland ±4 acres; Riparian ±4 acres)	Lowest (Wetland ±2 acres; Riparian ±3 acres)	Lowest (Wetland ±2 acres; Riparian ±3 acres)
Potential Site Remediation Effort	Highest	Medium	Lowest
Bridge and Culvert Structures: Comparative cost to modify/re-purpose	Highest	Medium	Lowest

Northern Valley Greenway

Technical Planning Assistance Report

Appendices

Appendix A - Memorandum of Stakeholder Workshop

Appendix B - Memorandum of Public Information Center

July 2019


STOP
Broadway
R
R

APPENDIX

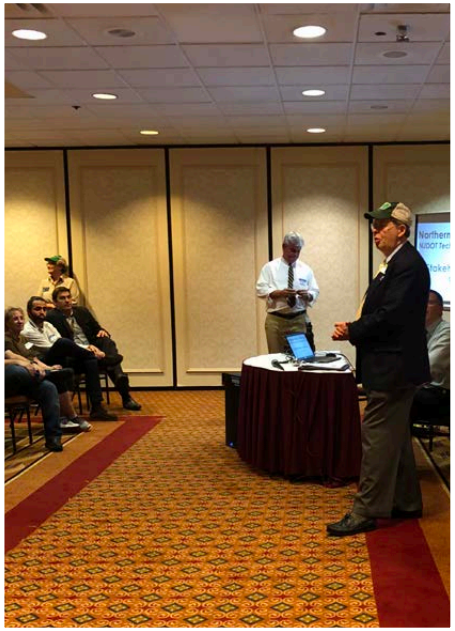
A

Stakeholder Workshop Memorandum

Northern Valley Greenway | Technical Planning Assistance

DATE/TIME: 09/26/2018, 4:30-7:30 PM

LOCATION: Clinton Inn Hotel & Event Center, 145 Dean Drive, Tenafly, NJ 07670



Contents

Recap of Workshop

Purpose

The purpose of the Stakeholder Workshop (Meeting #2 in the project scope of work) was to engage a diverse range of stakeholders with an interest in the Northern Valley Greenway, bring the project and the current NJDOT engagement to their attention, and solicit their input, reactions, and local knowledge related to several facets of the project.

Primary discussion items addressed through the workshop included:

- Project goals, purpose, and needs;
- Key issues, opportunities, and constraints;
- Results of the preliminary existing conditions, environmental, and intersection analysis; and
- The role of the stakeholders in the overall process.

This memorandum has been compiled to serve as a record of stakeholder input collected from the workshop. This input will be consulted in advancement of the current study.

Format

The workshop was conducted with an open house format and staffed by NJDOT Office of Bicycle and Pedestrian Programs and NV5 with volunteer support from the Northern Valley Greenway Committee. The event was timed (4:30 - 7:30 PM) to accommodate professionals at the end of their work day and local interest stakeholders in the early evening. Attendees were able to arrive and depart at their convenience with ample opportunity to discuss staffed exhibits throughout the room.

A ten-minute overview presentation was provided three times throughout the session. Stations (staffed exhibits) provided the opportunity for stakeholders to engage the project team, ask questions, and provide input. The stations included the following:

- Welcome/Sign-In Table with Map: Where are you from?*
- Map Station (opportunities and constraints)
- Traffic/Crossings Station
- Purpose and Need Station
- Resources Station
- Open Ended Input/Comment Forms Station*

*Station was staffed by Northern Valley Greenway volunteers

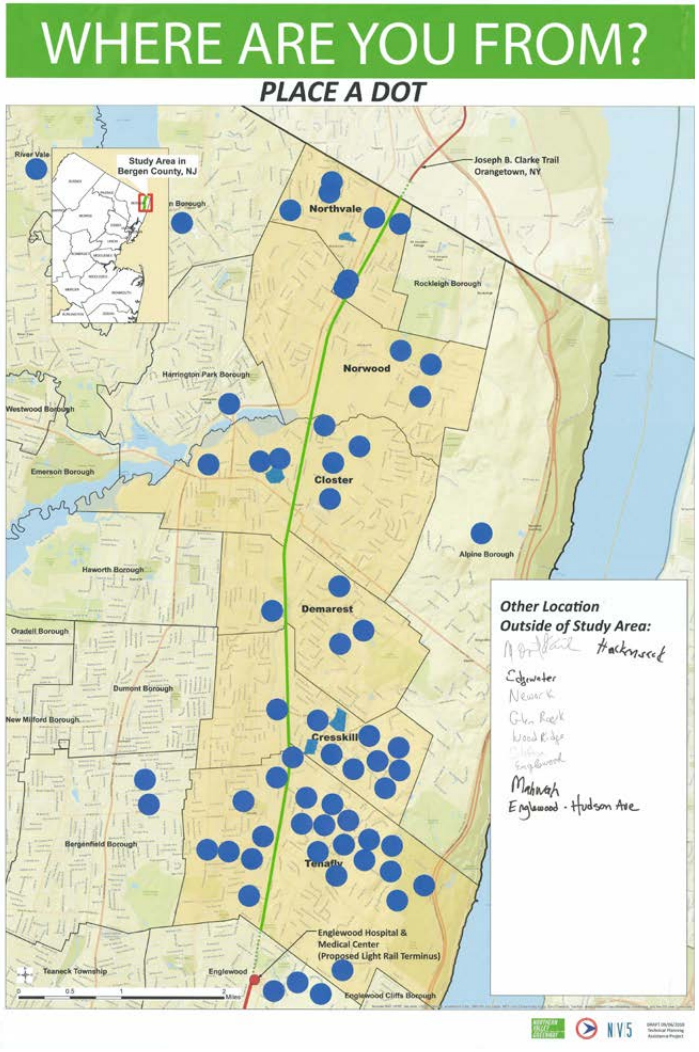
Key findings from each station are listed in the Record of Exhibits and Input Collected sections that are included in this document.

Record of Attendance

The Northern Valley Greenway Stakeholder Workshop included a sign-in table that was staffed by Northern Valley Greenway volunteers. The following is a brief analysis of the attendees that signed in.

- 81 attendees signed in to the workshop
- 61 attendees are from the six municipalities in the study area, broken down as follows:
  - Tenafly: ±27
  - Cresskill: ±9
  - Demarest: 2
  - Closter: 8
  - Norwood: ±3
  - Northvale: ±11
- Representatives from nearby communities attended, including Englewood, Bergenfield, Edgewater, Glen Rock, Hackensack, Harrington Park, Old Tappan, Alpine, and Riverdale.
- 61 attendees represented the following interests:
  - Clubs, Advocates, or NVG Committee: 17
  - Businesses: 7
  - Municipal Councilpersons: 7
  - Municipal Mayors: 1 (Tenafly)
  - Municipal Board, Commission, or Committee: 10
  - Police/Fire: 3
  - Municipal Professionals: 1
  - School or Board of Education: 7
  - State or Regional Professionals: 9
- Professional staff from State or regional agencies/organizations attended, including:
  - Bergen County
  - EZ Ride
  - NJ TRANSIT
  - NJDOT (Railroad Division)
  - NJTPA

The "Where are you from?" Map provides an informal overview of the geographic distribution of meeting attendees.



Record of Exhibits and Input Collected

Map Station (Opportunities and Constraints)

The Map Station was staffed by three NV5 professionals. The exhibit consisted of seven maps displaying the Northern Valley Greenway study area from the southern extent (approximately the southern Tenafly border) to the northern extent (northern Northvale, New Jersey/New York border). The mapping also included possible connection points that can be assessed in future studies, including a possible connection to the proposed Hudson-Bergen Light Rail Terminal Station at Englewood Hospital & Medical Center in the south, and a possible connection to the Joseph B. Clarke Trail in the north. NV5 staff engaged in discussion with attendees to identify opportunities, destinations, connections, constraints, or other issues along the right-of-way.

Input collected at the Map Station included:

- General comments,
- Identification of key locations/connections, and
- Comments associated with specific locations relative to the study area.

The input has been transcribed into the table of the following page and will be geolocated (entered into a GIS database) and labeled as appropriate as part of Task 3.3 in the project scope of work, contributing to the Opportunities and Constraints Summary and Map deliverable.

Map Station Comments 1 of 2

Map #	Municipality	Comments	Classification
1	Englewood-Tenafly	This [study] needs to be extended south to Overpeck Park- this needs to be part of the "core project." * must run through Englewood	General comment
1	Englewood-Tenafly	Rail-with-trail	Location-based Comment
1	Englewood-Tenafly	Here it shows project going into Englewood, but Englewood has not been part of any discussions. We would like to be included	Location-based Comment
1	Englewood-Tenafly	Trail?	Location-based Comment
1	Englewood-Tenafly	Retain mile markers along corridor "JC" 27 "distance to Jersey City	General comment
2	Tenafly	Church with preschool	ID of Key Location
2	Tenafly	Oresko Park	ID of Key Location
2	Tenafly	Library Boro Hall	ID of Key Location
2	Tenafly	"Huyler" Park	ID of Key Location
2	Tenafly	Jack in the Box [/ Presbyterian Church at Tenafly]	ID of Key Location
2	Tenafly	Uyler	ID of Key Location
2	Tenafly	ABC Learning Express	ID of Key Location
2	Tenafly	"Old" Valley Hotel [current site of ABC Learning Express]	ID of Key Location
2	Tenafly	Elizabeth Cady Stanton House	ID of Key Location
2	Tenafly	Tenafly Mid School	ID of Key Location
2	Tenafly	Add new road across tracks	Location-based Comment
2	Tenafly	Tenafly considering options to incorporate as Green Space for Greenway	Location-based Comment
2	Tenafly	Tenakill S.C.	ID of Key Location
2	Tenafly	? H.S. Connections for Cross Country team access walking/running Unit (P.E. Class)	Location-based Comment

Map Station Comments 2 of 2

Map #	Municipality	Comments	Classification
2	Tenafly	Need access to Greenway there are no cross streets for a long stretch	Location-based Comment
2	Tenafly	Connection to Tenafly Nature Center	Location-based Comment
3	Cresskill	Address capacity concerns as part of improvement plans	Location-based Comment
3	Cresskill	How to access trail from other side of Piermont Rd.	Location-based Comment
3	Cresskill	Cresskill interested in improving	Location-based Comment
3	Cresskill	Maintain Access Path otherwise the town may have to pay for busing	Location-based Comment
4	Cresskill-Demarest	Will this flood zone/trail be elevated?	Location-based Comment
5	Closter	Shopping Center	ID of Key Location
5	Closter	Lots of trash cleanup	Location-based Comment
5	Closter	Potential/desired additional crossing to accommodate trucks from waste transfer station	Location-based Comment
5	Closter	When did CSX stop serving line- or, when was the last call by customer on line? Determine year.	General comment
5	Closter	Waste transfer station	ID of Key Location
5	Closter	Siding? Active? (NJDOT interaction)	Location-based Comment

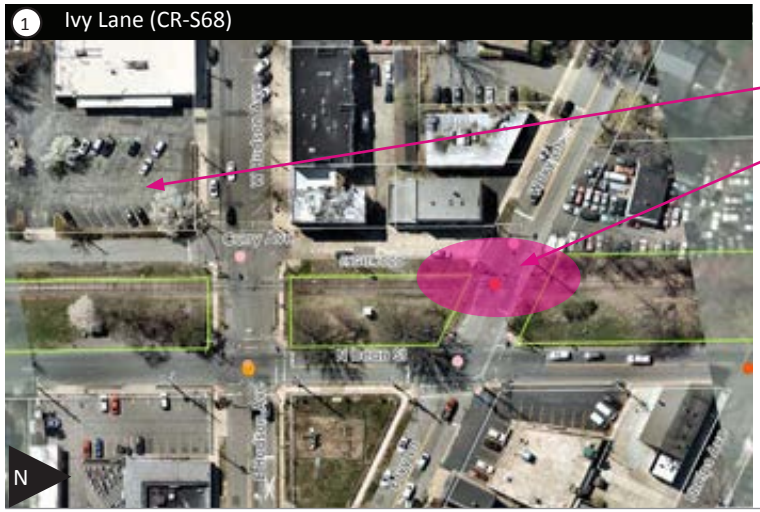
Traffic/Crossings Station

The Traffic/Crossings Station was staffed by two NV5 professionals. The station consisted of aerial images of 16 roadway crossings in the study area. NV5 staff engaged in discussion with the stakeholder attendees to identify locations of concern in regard to traffic volume, congestion, safety, speed, and potential use of the greenway and roadway crossings by bicyclists and pedestrians.

In general, the comments collected relate to:

- Observation/perception of potential conflict, safety concerns, or issues with existing signals at Clinton Avenue, Washington Street, and Jay Street in Tenafly, and at Broadway in Norwood, and at Paris Avenue in Northvale
- Connections to the greenway, especially near schools or at mid-block locations (in long stretches between existing roadway crossings)
- Parking (for motor vehicles) to provide greenway access
- Parking for bicycles
- General design ideas, such as:
  - Preservation of historical features/markers
  - Benches
  - Greenway surface treatment
- Ideas for grade crossing configurations that would be compatible with a greenway, such as:
  - Sensors or actuation of signals by greenway travelers,
  - Structures for greenway travelers provide grade separation (tunnel, bridge), and
  - Mid-block access to right-of-way

The stakeholder input has been transcribed on the following pages and keyed to map locations as appropriate.



Comments
Walgreens has big parking lot. Excess parking.
Flooding problem
Should extend all the way through Englewood to Overpeck County Park- additional crossings needed in Englewood
Hudson Ave has no bicycle parking available. It would be great to bike and get on bus transportation ie, to NYC

Comment
Dean Street will flood in very heavy rains

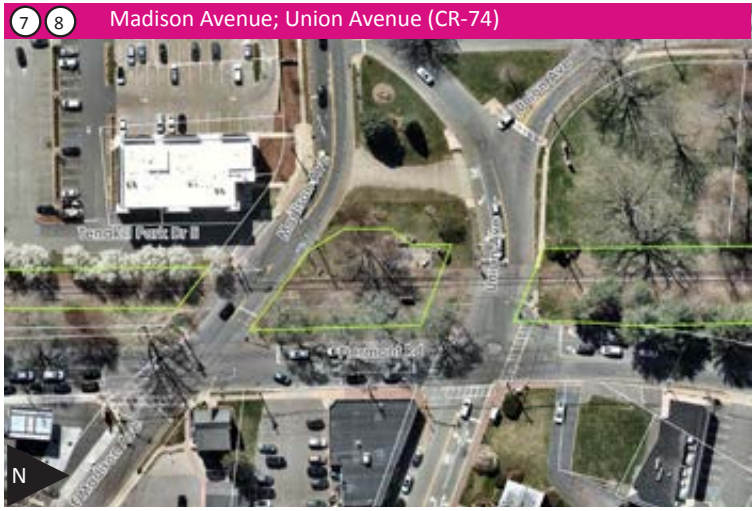
3 Clinton Avenue

Comments
Passive sensors to control pedestrian crossings
Heavy traffic middle and high school
Pedestrians crossing illegally
Cars stopping past stop bar
Potential road closing
Flasher (15 year old plan for signal)
The platform and train tracks must be maintained and retained from Clinton Ave. to Washington Ave.
Include historic interpretive panels
Retain mile markers "JC" with miles to/from Jersey City

4 5 Washington Street; Jay Street/Riveredge Road

Comment
Blinking light should be signal
Near misses- cars vs. pedestrians
Passive sensors to control pedestrian crossings across road
Proximity to Tenafly Middle and High Schools- high use by students
Ton of wrong way drivers on Piermont one way
Lots of traffic on River Edge Rd, Washington Ave, West/East Clinton (high speed)
Potential pedestrian plaza
Concern about issue of parking for businesses
Where will people park for the Greenway?
Operates as 1 signal

Comment
Grade crossing refurbished in concrete in 2016 or 2017 for around $80,000



Comments
Cresskill has interest in reconfiguring intersection
Downtown Cresskill very constricted
Having benches all along the way would be great
What about after crossing points besides intersections? (i.e. mid-block crossing to access greenway in long stretches where there are not any grade crossings)

9 Hardenburgh Avenue (CR-80)

Comments
Park St. continues on to other local parks and quiet side streets
What kind of surface will the trail have? There's a large active senior population in Bergen County and getting out on a flat paved surface = out of traffic is vital for them.

10 Demarest Avenue (CR-41)

Comments
It's good that separate pedestrian and bicycle paths are planned
Like to see Maintenance Requirements kept to a realistic minimum. Native prairie grasses do well there now and look beautiful. If any landscaping is needed it would be practical to use big brush strokes and no get into minutia that will realistically not be cared for. Ernst Seeds is a great source for wildflower/grassland mixes of local eco types.

11 High Street (CR-502)

Comments
See Demarest Ave. comments on prior page

12 Closter Dock Road (CR-102)

Comments
Closter traffic research with new shopping plaza
Exploring cut through near Dyke's Lumber
CDR intersection is in need of upgrade anyway. It's good time to include it and design a holistic approach.
Note loss of parking- use below minimum requirement
School dismissal time- traffic dynamics! 3:00-3:45pm
Traffic circle?
Tunnel
No traffic lights after Cresskill

13 Blanch Avenue

Comment
"Blanche" missing the "e"

Note: Blanch appears to be spelled without an "e"

14 Broadway (CR-106)

Comments
Broadway is heavily traveled especially on workdays during commute hours
Tunnels
Broadway or Paris Ave and Hardenburgh = dangerous crossings
Bike racks

15 Paris Avenue (CR-108)

Comments
Tunnel
Significant traffic on Paris between Livingston and Piermont during rush hour
Limited visibility of northbound trail users by west bound vehicles and emergency responding from Washington ave
Any chance of bridge at Paris Ave & Broadway?

16 Pierron Street

Comments
None

Purpose and Need Station

The Purpose and Need Station was staffed by a professional from NV5. In Task 2 of the Scope of Work, NV5 is assigned to develop a Draft Purpose and Need Statement for the Northern Valley Greenway. The purpose of this station was to obtain input on the three main components of a Purpose and Need Statement: the Need, the Goals, and the Objectives of the Northern Valley Greenway.

The following input was received and will be integrated or addressed as NV5 advances the Draft Purpose and Need Statement.

Category	Comment
Purpose	Overpeck Park to the NYS trail system. In Englewood it should be trail adjacent to rail.
	Safety, mobility, and recreation
	And recreation? Recreation and development of tourism for local businesses is a major purpose.
	Note that this right of way is not underutilized. It is NON UTILIZED.
Needs	Safety is #1 issue. Exercise is #2 (health = society today does more). Better access than crowded roads. Safer than "Bike Lanes". Provide for emergency situations "pull box". So sad to see this corridor deteriorate of the years -- needs to be improved upon -- better economic and health.
	Safety. A way for someone to get help if no phone - like a "pull".
Goals & Objectives	Alternative to 9W?
	Unlikely to change use of 9W. 9W has few intersections which allows for faster cycling speed. Most cyclists using 9W are experienced/faster cyclists.
	Make sure to provide space to park cars for people to travel and leave while they can walk or bike ride on these lanes.
	Goal 1: Agree. Goal 2: Agree. Goal 3: Access to health care facility is important. Access to NY is necessary -- if NY can do it -- NJ can do it too!! How did they accomplish it and has been extended over the years? Goal 4: Agree. Many small towns will benefit economically. Goal 5: Agree.
	Goal 2: Alternative to cycling on County Road and Piermont Road.
	Safety - so important for safety instead of biking on 9W. Also Closter Whole Foods - great access for business to be brought into town.
	Goal 2: Provide an alternate route to bicycling on Piermont Road. Road is narrow and winding and heavily traveled by bicyclists (in Norwood, Closter, and Rockleigh). Need to create easy maintenance trail. Goal 3: It is wise to maintain rail access for northern connections. Try to locate the bike/walk path next to RR line and utilize the space without eliminating the railway.

Resources Station

The Resources Station was staffed by a professional from NV5. As a matter of background research for the project, NV5 has been gathering past reports, related plans, and other data sources related to the study area. In this exhibit, NV5 presented the resources that have been gathered to date and asked attendees to list any sources of which they are aware, but as of yet had not been identified for the study. The following list emerged from the exhibit. NV5 will follow up to gather these resources as necessary for the advancement of the project.

Town	Type	Name/Title	Source	Notes
Tenafly	Redevelopment	Penatone Superfund Site		Site has been remediated and redeveloped into the "Plaza" town homes
Tenafly	Impact Study	Downtown Traffic Impact Study		Riveredge, Jay Street, Washington
Project Area	Downloadable data	Model data	NJTPA	
Project Area	Downloadable data	Palisades	NJTPA	
Project Area	Downloadable data	GIS Data	NJTPA	
Tenafly	Report documents		Historical Commission	Historical info on train stations
Closter	Report documents		Historical Commission	Historical info on train stations
Demarest	Report documents		Historical Commission	Historical info on train stations
Bergen County	NVG Grade crossing		Bergen County	

Open Ended Input/Comment Forms Station

The Open Ended Input/Comment Forms Station was staffed by Northern Valley Greenway volunteers. The following is a brief analysis of the Open Ended Input and Comment Forms that were collected.

A total of 68 input forms were collected associated with the following formats:

- Open Ended Input: **48 responses**
  - "My favorite use of the Greenway will be..." **14 responses**
  - "The Greenway will help my community by..." **14 responses**
  - "My unique idea to make the Greenway better is..." **8 responses**
  - "My biggest concern for the Greenway is..." **12 responses**
- Comment Forms: **20 responses**

The responses dealt with the following issues and topics, sorted by rate of occurrence:

Topic	# Of Comments
Bicycling	17
Safety / Security	15
Design Considerations	15
Walking	14
Access / Connections / Mobility	13
Traffic / Crossings	13
Economic Benefits	7
Health / Exercise / Recreation	6
Community / Social / Aesthetic	6
Englewood	5
Education / Ecology / Art / Culture	4
Misc. / Other Examples	4
Rail with Trail	4
Parking	3
Emergency Access	3
Maintenance Considerations	3
Funding Considerations	3
Skating	2
Dog Walking	2

Drilling a level deeper into the replies, the following is observed by topic:

"My favorite use of the Greenway will be..."

The top responses are:

- Biking: 8
- Walking: 6

"The Greenway will help my community by..."

The top responses are:

- Access/Connections/Mobility: 6
- Community/Social/Aesthetic: 5
- Biking: 5
- Walking: 4
- Safety/Security: 3

"My unique idea to make the Greenway better is..."

The responses varied widely but mostly addressed design considerations.

"My biggest concern for the Greenway is..."

The top responses are:

- Traffic/Crossings: 7
- Safety/Security: 5
- Emergency Access: 3

Comment Forms:

Principally dealt with design considerations

The Open Ended Input and Comment Forms yielded additional input, including:

- Ideas for maintaining the railroad tracks in a "rail-with-trail" greenway configuration
- Expressed desire by residents of Englewood for a study to assess greenway possibilities in the City of Englewood

The input collected from the Open Ended Input and Comment Forms is tabulated beginning on the next page.

Open Ended / Comments Forms 1 of 8

Format	Comment	Bicycling	Walking	Skating	Health / Exercise / Recreation	Dog Walking	Access / Connections / Mobility	Community / Social / Aesthetic	Economic Benefits	Traffic / Crossings	Safety / Security	Parking	Emergency Access	Education / Ecology / Art / Culture	Design Considerations	Rail with Trail	Maintenance Considerations	Funding Considerations	Englewood	Misc. / Other Examples
My favorite use of the Greenway will be...	Biking	●																		
	Riding my bicycle. However, I live in Bergenfield, so must drive to the path. I'm very concerned about parking.	●										●								
	Dog walk, Bike, Roller skate	●		●		●														
	Safe biking and walking path to get exercise. Safe path for kids to walk or bike to school and parks.	●	●		●						●									
	Walking!		●																	
	Walking!		●																	
	Biking	●																		
	To connect residents from as many towns as possible in Bergen County. Connect green spaces. I would use it for recreation and for non-motorized transportation.	●	●		●		●													
	Biking	●																		
	Roller skating			●																
	Sharing it with friends and family							●												
	Exploring food options on the trail in each town.						●		●											
	Walk		●																	
	Walking, biking	●	●																	

Open Ended / Comments Forms 2 of 8

Format	Comment	Bicycling	Walking	Skating	Health / Exercise / Recreation	Dog Walking	Access / Connections / Mobility	Community / Social / Aesthetic	Economic Benefits	Traffic / Crossings	Safety / Security	Parking	Emergency Access	Education / Ecology / Art / Culture	Design Considerations	Rail with Trail	Maintenance Considerations	Funding Considerations	Englewood	Misc. / Other Examples
The Greenway will help my community by…	Will greatly reduce bicycle traffic on Piermont Road in Closter, Norwood, & Rockleigh.	●								●										
	Increase economic activities. Provide a safe environment for outdoor activities. Generate healthy living space for all the communities along the trail.				●				●		●									
	Allowing safer paths for people to get from town to town, especially those that do not drive or own a car. Otherwise, I am afraid of being hit by a driver on the way to and from work.						●				●									
	Increasing bike path with better safety than 9W. Bring new business to Closter Plaza. Create alternative means of going to neighboring towns.	●					●		●		●									
	Bringing all of the Northern Valley towns together. It will allow a safer path for bikers traveling up to New York State.						●				●									
	Keeping stores open.								●											
	Getting people out and walking. Bringing community together. Opportunity to meet residents from other towns along the greenway.		●				●	●												
	Providing more recreational opportunities for Englewood residents. Currently Englewood has a higher than average obesity rate and higher prevalence of diabetes. Providing more opportunities for non-motorized transportation for Englewood residents. It is essential that the trail run through Englewood.	●	●		●														●	

Open Ended / Comments Forms 3 of 8

Format	Comment	Bicycling	Walking	Skating	Health / Exercise / Recreation	Dog Walking	Access / Connections / Mobility	Community / Social / Aesthetic	Economic Benefits	Traffic / Crossings	Safety / Security	Parking	Emergency Access	Education / Ecology / Art / Culture	Design Considerations	Rail with Trail	Maintenance Considerations	Funding Considerations	Englewood	Misc. / Other Examples
The Greenway will help my community by...	Cleaning up the area "by the tracks".							●												
	See the Monon Trail in Indianapolis as a great example.																			●
	Getting rid of the desolate RR tracks.							●												
	Allowing non-motorized access from Nyack, NY all the way to Englewood.	●	●				●												●	
	Strengthening social ties among community members with similar interests, joggers, bikers, walkers, etc. People will be less isolated.	●	●		●		●	●												
	Providing educational opportunities for students to learn about public administration, local governance, and the various stages of major projects. The greenway will provide scientific opportunities to investigate plant life and outdoor space for creative writing and seminar discussions align with opportunities for students to study and socialize in a safe environment.							●						●						

Open Ended / Comments Forms 4 of 8

Format	Comment	Bicycling	Walking	Skating	Health / Exercise / Recreation	Dog Walking	Access / Connections / Mobility	Community / Social / Aesthetic	Economic Benefits	Traffic / Crossings	Safety / Security	Parking	Emergency Access	Education / Ecology / Art / Culture	Design Considerations	Rail with Trail	Maintenance Considerations	Funding Considerations	Englewood	Misc. / Other Examples
My unique idea to make the Greenway better is...	Pretty like High Line -- flowers, plantings, art work where could be placed, cultural opportunities													●						●
	Combine greenway and light rail															●				
	Include rail with trail															●				
	Run through Englewood adjacent to the proposed rail and connect to Overpeck County Park. This should be part of the "core of the NVG project" and part of the first phase of this project.				●		●												●	
	Latte!								●											
	Follow the plan to have separate cycle and pedestrian paths.														●					
	Since Greenway will be mixed use (bike, pedestrian), please consider what materials will be used to build the path. Asphalt/concrete good for bikes, but dirt/cinders would be better for walkers, runners, and drainage. I am involved with North Jersey chapter of Sierra Club. Have you spoken to them to get some feedback or input? Please let me know if I can be of assistance. Please consider how to maintain greenway in the future. Funding? Human resources and materials. Security: at crossings especially - consider using same type of stantia as used in NYC (bike path terrorist attack).										●			●	●		●	●		
	Lights along pathway for early morning use or evening use with timers for light usage.														●					

Open Ended / Comments Forms 5 of 8

Format	Comment	Bicycling	Walking	Skating	Health / Exercise / Recreation	Dog Walking	Access / Connections / Mobility	Community / Social / Aesthetic	Economic Benefits	Traffic / Crossings	Safety / Security	Parking	Emergency Access	Education / Ecology / Art / Culture	Design Considerations	Rail with Trail	Maintenance Considerations	Funding Considerations	Englewood	Misc. / Other Examples
My biggest concern for the Greenway is...	Potential traffic congestion. Safety of pedestrians and motorists.		●							●	●									
	Safety and access to Cresskill High School by people using the path.						●				●									
	Emergency response through the pathway. Only one firehouse in Tenafly, meaning constantly crossing the railroad tracks. Crime at night. Welcoming anyone and everyone to hang out on the pathway. School hours and traffic very close to schools.									●	●		●							
	EMS crossing and access.												●							
	Traffic and cross streets.									●										
	Intersections in Tenafly: especially Clinton Ave., Washington Ave., and Riveredge. Will overpasses be built for safe transit on greenway?									●					●					
	How safe at crossings where there are no traffic lights.									●	●									
	Parking.											●								
	Englewood was purposely excluded from being part of the "core project" and from all conversations. The 6 municipalities that are promoting this project need to be inclusive of Englewood and Englewood residents. Bergen County and the State of NJ must be an inclusive County / State.																		●	
	Crossings.									●										
	Safety at busy intersections, especially in bad weather and or low light.									●	●									
	Worried town residents will get stuck with maintenance costs: clean up and patrol officer. Emergency personnel will not be able to get access to path.												●				●	●		

Open Ended / Comments Forms 6 of 8

Format	Comment	Bicycling	Walking	Skating	Health / Exercise / Recreation	Dog Walking	Access / Connections / Mobility	Community / Social / Aesthetic	Economic Benefits	Traffic / Crossings	Safety / Security	Parking	Emergency Access	Education / Ecology / Art / Culture	Design Considerations	Rail with Trail	Maintenance Considerations	Funding Considerations	Englewood	Misc. / Other Examples
Comment Form	Wonderful concept! Have lots of benches -- could be memorials or sponsored by local businesses.														●			●		
	Wide bike lane: 18 feet														●					
	Suggest maintaining one track as far as Closter to remove solid waste by rail instead of truck. 60-foot right-of-way can accommodate both trail and rail. Freight service would be during midnight hours when light rail is not running.														●	●				
	1. Imperative that there be traffic signals at busy grade crossings -- possibly motion-actuated. 2. Trees should be planted at reasonable intervals to provide shade for bikers and walkers. 3. Signs must be posted advising bikers and walkers to stay to the right. 4. Benches and water fountains are necessary. 5. Signs prohibiting littering should be posted. 6. It is unclear whether people can walk their dogs here. If so, we should provide litter bags.					●				●				●	●					
	Would like to see a continuous rail trail with use of tunnels at intersections.									●					●					
	A great concept. A safe place to walk and bike (get pedestrians, joggers, and bikers off the street). Will revitalize downtown Tenafly!	●	●						●		●									
	I support the Greenway																			●
	Please ensure that paths are wide -- 20 feet at least -- to allow safe space for bicycles and pedestrians (and runners) moving at different speeds and in opposing directions.	●	●												●					

Open Ended / Comments Forms 7 of 8

Format	Comment	Bicycling	Walking	Skating	Health / Exercise / Recreation	Dog Walking	Access / Connections / Mobility	Community / Social / Aesthetic	Economic Benefits	Traffic / Crossings	Safety / Security	Parking	Emergency Access	Education / Ecology / Art / Culture	Design Considerations	Rail with Trail	Maintenance Considerations	Funding Considerations	Englewood	Misc. / Other Examples
Comment Form	Concern with crossings at County roads. Overpass or continue with RR gates and lights? Overpass would be preferable so as to not disrupt flow of either peds/bikes or traffic. Or possible RR gates/lights actuation can be converted to a pedestrian actuated system which makes the gate go down similar to a train passing. The actuation would have to be timed so as to occur only 2-3 minutes if actuated (i.e. ped/bike would have to wait, similar to waiting at a traffic light.) Not sure this would work to well though with young children on the trail. Would they be aware to stop at the roadway? Would like to see how this is dealt with at other established trails. Other than this issue, I am very supportive of the concept and I think it would be a great amenity to Bergen County.									●	●				●					
	1. The concern is that the City of Englewood was not included in any discussions and the proposed project does NOT run through Englewood. 2. This proposed trail should run through Englewood adjacent to the rail and connect to Overpeck Park.						●									●			●	
	Fully support the development of a path for walking and biking -- keep it simple / get it done.	●	●																	
	I am against exercise stations. In my experience they are not used much and are soon vandalized.														●					
	Don't need tunnels. Don't need gates at intersections. Bike riders should not have to dismount.	●								●										
	The trail will be fantastic for public safety. It will also help attract people to businesses in town -- include local chambers of commerce? Excited about connections to Rockland trail, which will extend over Tappan Zee.						●		●		●									

Open Ended / Comments Forms 8 of 8

Format	Comment	Bicycling	Walking	Skating	Health / Exercise / Recreation	Dog Walking	Access / Connections / Mobility	Community / Social / Aesthetic	Economic Benefits	Traffic / Crossings	Safety / Security	Parking	Emergency Access	Education / Ecology / Art / Culture	Design Considerations	Rail with Trail	Maintenance Considerations	Funding Considerations	Englewood	Misc. / Other Examples
Comment Form	Note that there is a 20+ mile long rail to trail conversion project completed in Indianapolis going from downtown North through Carmel (I believe that it ends in Westfield). It might be a useful reference.																			●
	Crossings along Piermont Road in between Downtown Tenafly and Cresskill need to be added. Right now there is none.									●					●					
	How will bikes go from GWB down to the Greenway? Need a SAFE route -- not Clinton Ave.						●				●									
	Even if it's just a dirt trail with the tracks removed, it will be wonderful.														●					
	Closter -- please keep realistic maintenance levels when it comes to plantings. We love trees but overhead transmission lines will restrict ultimate tree size.														●		●			
	Where will people park when they come to use the Greenway? We cannot afford to lose downtown parking.											●								

APPENDIX

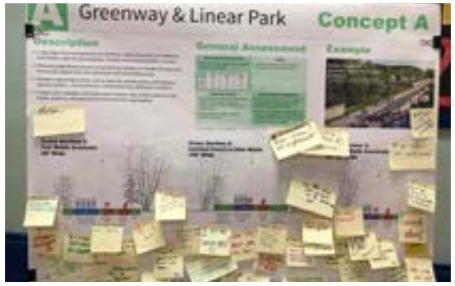
B

Public Information Center Memorandum

Northern Valley Greenway | Technical Planning Assistance

DATE/TIME: 03/05/2019, 5:00-8:00 PM

LOCATION: Northern Valley Regional High School at Demarest, 150 Knickerbocker Road, Demarest, NJ 07627



Contents

Recap of Public Information Center

Purpose

The purpose of the Public Information Center (Meeting #3 in the project scope of work) was to present findings from the Draft Environmental Report and Draft Opportunities and Constraints Summary, present Draft Greenway Alignment Alternatives and Crossing Treatments, and solicit input to advance and finalize the Conceptual Sketch Alignment and Alternatives Analysis task (Task 4). Both stakeholders and the general public were invited to attend this open house style meeting.

Primary information presented at the Public Information Center included:

- Draft general project context and findings to date from GIS analysis of the study area right-of-way;
- Draft Opportunities and Constraints Map, including Environmental Constraints Map;
- Draft typical existing cross sections observed in the draft study area right-of-way;
- Draft greenway alignment alternatives (sketch concepts) for assessment;
- Draft crossing treatments.

Additionally, a visioning exhibit was made available to meeting attendees to encourage thought and discussion around design details associated with greenways and other public space.

This memorandum has been compiled to serve as a record of input collected from the Public Information Center. This input will be consulted in advancement of the current study.

Format

The Public Information Center was conducted with an open house format (from 5:00 - 8:00 PM) and staffed by NJDOT Office of Bicycle and Pedestrian Programs and NV5 with volunteer support from the Northern Valley Greenway Committee. Attendees were able to arrive and depart at their convenience with ample opportunity to discuss staffed exhibits throughout the room.

Stations (staffed exhibits) provided the opportunity for attendees to engage the project team, ask questions, and provide input. The stations included the following:

- Welcome/Sign-In Table with Map: Where are you from?*
- Existing Conditions, Opportunities, and Constraints
- Sketch Concepts
- Traffic/Crossings
- Visioning
- Comment Forms Station

  * Station was staffed by Northern Valley Greenway volunteers

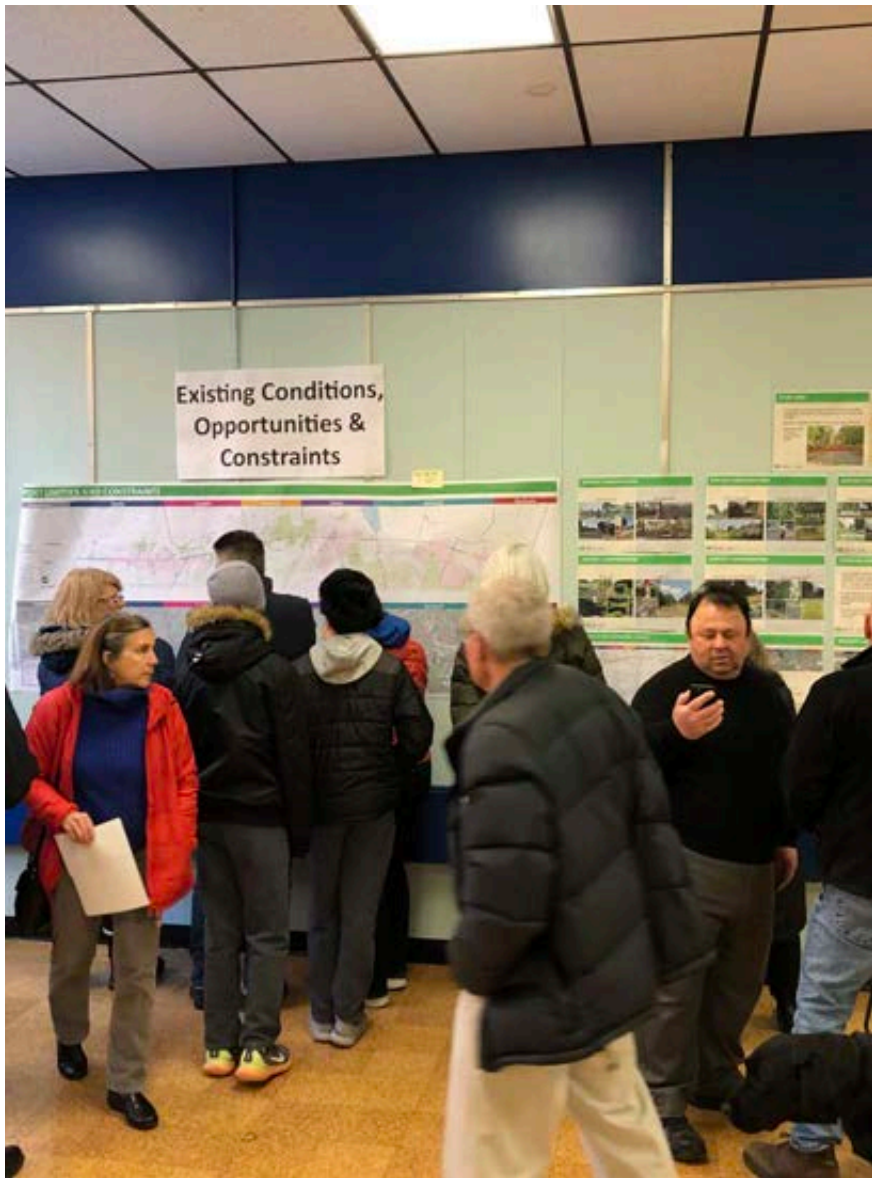
Input collected from each station is recorded in the Record of Exhibits and Input Collected sections of this document.

General Findings

The Northern Valley Greenway Public Information Center was well attended with a diverse population of local residents, community groups, and elected officials in attendance. In general, the input collected reflects support for the advancement of a greenway within the Northern Branch Corridor in the study area of Tenafly, Cresskill, Demarest, Closter, Norwood, and Northvale.

The Public Information Center achieved its intended outcome of presenting technical materials and collecting public input in order to advance the assessment task (Task 4) of the NJDOT Northern Valley Greenway Technical Planning Assistance Study. The input, as collected, indicates that each of the three sketch concepts (Greenway & Linear Park, Shared Use Path, and Rail with Trail) merits inclusion in Task 4 with no technical changes to the cross sections. No comments were collected to indicate that there is a desire for a concept for the corridor beyond or in addition to the three that were presented.

A synthesis of findings from each technical exhibit, along with a record of all comments collected, is included in this memorandum.



Public Information Center Notification

The general public, officials, and other stakeholders were notified of the Public Information Center by the New Jersey Transit Office of Community and Constituent Relations in accordance with the requirements listed in the NJDOT Public Involvement Action Plan. The Public Information Center Notification on the right half of this page was made available through the NJDOT Public Meetings website and was emailed to representatives from Bergen County, NJ TRANSIT, North Jersey Transportation Planning Association, EZ-Ride TMA, and to officials from the six municipalities in the immediate study area and surrounding municipalities. News articles in advance of the Public Information Center were published by the Northern Valley Press and NorthJersey.com.

The Northern Valley Greenway Committee also provided notification in advance of the Public Information Center through its contact database. In addition to the core six municipalities, their professional staffs, school administration, local businesses, the Change.org petition and NVG Committee contacts, the NVG also invited the Mayor and Councils from Alpine, Bergenfield, Emerson, Dumont, Englewood, Englewood Cliffs, Harrington Park, Haworth, Old Tappan, Rockleigh, Teaneck and Orangetown, NY.

Governor Phil Murphy
Lt. Governor Sheila Oliver

New Jersey Department of Transportation
Commissioner Diane Gutierrez-Scaccetti
www.njdot.nj.gov

Public Information Center

Tuesday, March 5th, 2019, 5:00 PM to 8:00 PM

Northern Valley Greenway Technical Planning Assistance Study
General Study Area: Northern Branch Railroad Corridor, Bergen County, NJ
Municipalities of Tenafly, Cresskill, Demarest, Closter, Norwood, and Northvale

The New Jersey Department of Transportation (NJDOT), committed to developing transportation improvements that best balance transportation needs, the environment, community concerns and costs, will hold a **Public Information Center (PIC)** to provide local residents and businesses with information on the **Northern Valley Greenway Technical Planning Assistance Study**. You are encouraged to actively participate by providing comments at the meeting, by mail, or by e-mail.

THE MEETING

The Public Information Center will be held at:

Northern Valley Regional High School at Demarest
150 Knickerbocker Road
Demarest, NJ 07627
Tuesday, March 5th, 2019
From 5:00 – 8:00 PM

In the event of inclement weather, the make-up date is Thursday, March 7th from 5:00-8:00 PM at the same location.

Please come at a time that is convenient for you. You will have an opportunity to review exhibits of the draft study findings, ask questions and discuss any concerns with NJDOT representatives and the Planning Contractor, NV5. Property owners with rental units are advised that tenants are also invited and encouraged to participate.

PROJECT BACKGROUND

The Northern Valley Greenway is a local initiative to create a non-motorized transportation facility for walkers, joggers, and bicyclists in Bergen County's Northern Valley, a region of 15 municipalities between the Palisades and the Hackensack River. The greenway is envisioned to traverse six municipalities over a distance of 7.4 miles, converting Northern Branch Corridor railroad right-of-way (currently owned by CSX) into a non-motorized transportation facility with recreation opportunities.

The local initiative for the greenway builds on a Rotary Service project that had ascertained that it may be possible to convert the railroad right-of-way to trail use in the future through a railbanking agreement. A local citizens' committee was formed in 2016, and the mayors and councils of the six boroughs along the right-of-way passed a set of resolutions in 2017 to authorize the formation of the Northern Valley Greenway Committee. The Committee is tasked to plan and advance the greenway initiative, work with stakeholders and the pubic, and coordinate municipal, county, state, federal, and regional agency interest and activities related to the initiative.

TECHNICAL PLANNING ASSISTANCE STUDY

The Public Information Center will provide the findings of a planning-level study to develop an initial understanding of the feasibility of a non-motorized, multimodal transportation facility within the Northern Branch Corridor from Tenafly to Northvale. The study utilizes available Geographic Information Systems (GIS) data supplemented by field observation, stakeholder, and public input to document and assess environmental constraints, general opportunities for a greenway, and future considerations related to constructability and permitting. The study is being conducted through the NJDOT Office of Bicycle and Pedestrian Programs.

PROJECT SCHEDULE

Start of Study:	July 2018
Estimated Completion of Study:	March 2019

For further information, please contact:

Anthony Sytko, Regional Manager

New Jersey Department of Transportation
Community & Constituent Relations
PO Box 600, Trenton, NJ 08625-0600
Phone: 609-530-2110
E-mail: Anthony.Sytko@dot.nj.gov

Governor Phil Murphy
Lt. Governor Sheila Oliver

Commissioner Diane Gutierrez-Scaccetti

www.njdot.nj.gov

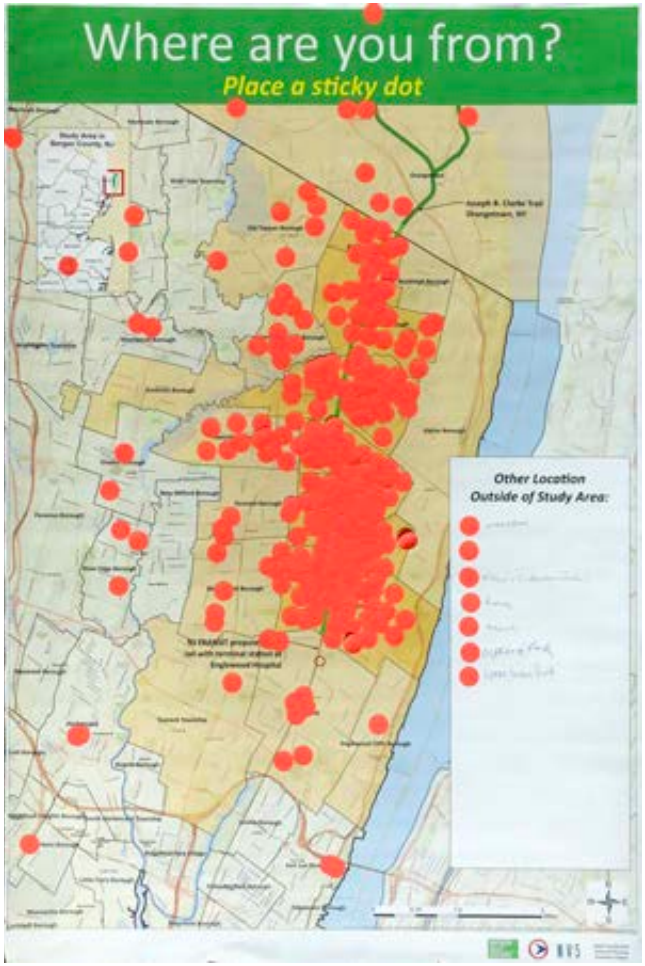
Record of Attendance

The Northern Valley Greenway Public Information Center was well attended and included the following:

- 334 attendees signed in
- 224 attendees (67%) were from the six municipalities in the immediate study area, broken down as follows:
  - Closter: 42
  - Cresskill: 42
  - Demarest: 39
  - Northvale: 16
  - Norwood: 17
  - Tenafly: 68

- Representatives from surround communities also attended, as follows:
  - Alpine
  - Bergenfield (5)
  - Dumont (5)
  - Englewood (12)
  - Englewood Cliffs
  - Fair Lawn
  - Hackensack (3)
  - Haledon
  - Harrington Park (11)
  - Haworth (19)
  - Hillsdale
  - Old Tappan (6)
  - Oradell (2)
  - Park Ridge
  - River Edge (2)
  - Ramsey
  - River vale
  - Teaneck
  - Upper Saddle River
  - Waldwick
  - Wayne
  - Westwood (2)
  - Woodcliff Lake (3)

The “Where are you from?” Map to the right provides an informal overview of the geographic distribution of meeting attendees.



Mayors or Council Members attended from the following municipalities:

Municipality	Mayor	Council Members
Bergenfield	1	
Closter	1	4
Englewood	1	
Harrington Park	1	
Haworth		2
Northvale	1	
Norwood	1	1
Tenafly	1	6

Senator Gerald Cardinale of the 39th District attended.

Professionals attended from the following organizations:

- Bergen County
- EZ Ride
- NJ TRANSIT
- NJDOT
- NJTPA
- Orangetown, NY Parks and Recreation

The following organizations were also represented:

- 3M
- Bicycle Touring Club of North Jersey (BTCNJ)
- Closter: 5K, Environmental, Improvement Committee, PTO, Zoning Board
- Cresskill: Board of Education, Environmental Commission
- Crestron
- Demarest: Athletic Association, Borough Historian, Nature Center, Police Department
- Garden Club of Englewood
- Garden State Track Club
- Hackensack River Canoe and Kayak Club)
- Lackawanna Coalition
- Metro-North Railroad Commuter Council
- MTBNJ (mountain biking club)
- Jersey Off Road Bicycle Association (JORBA)
- NJ Association of Rail Passengers
- Northern Valley Greenway
- Northern Valley Press
- Northern Valley regional High School District
- Norwood Recreation Committee
- Old Tappan Environmental Commission
- Piermont, NY Transportation/Traffic Committee
- Englewood Cliffs Planning Board
- Rotary Club
- Sierra Club
- Tenafly: Garden Club, Green Team, Historic Preservation Commission, Parent Club, Recreation Director
- The Bergen Record
- The Trust for Public Land

Record of Exhibits and Input Collected

Existing Conditions, Opportunities, and Constraints

The Existing Conditions, Opportunities, and Constraints Station was staffed by NV5. The exhibit consisted of 17 information panels displaying different aspects of the study area and a large format Opportunities and Constraints Map.

The information panels included descriptions of the typical 60' right-of-way, surrounding land use, demographics, municipal assets, watercourses, wetlands, and other elements that have been mapped through the course of this study.

The Opportunities and Constraints Map included two parallel maps of the corridor, each displaying different information. General opportunities for greenway development, direct connections, and on-road connections to local destination were shown on one map. Environmental constraints associated with wetlands, floodplain, threatened and endangered species, and historic properties were shown on the second map.

Meeting attendees were invited to mark the information panels and maps with markers and sticky notes in order to edit or augment the information on display.

Findings

This exhibit enabled attendees to comment on existing conditions as they relate to a potential greenway facility. Some site-specific input was collected and can be added to the final Opportunities and Constraints Map. Themes expressed at this station included:

- Desire for connectivity
- Desire to plan for parking and access
- Desire to understand timetable for project advancement

Comments received are recorded on the next page.

Existing Conditions, Opportunities, and Constraints Comments

Location	Comment
General	Rail with trail to provide transit connection
General	Separation of high [skill/speed] level bicyclists. Consider time separation, facility separation.
General	How long will it take?
General	[Plan for] PARKING
Englewood	Trail + Trail thru Englewood to Overpeck [County Park]
Demarest	Wakelee Field Walking Path Concept [a loop path around Wakelee field in Demarest was pursued a few years ago but did not come to fruition due to lack of funding; development of the greenway could be an appropriate mechanism to reignite the loop path initiative]
Closter	[No on-road connection to Open Space north of Madison Ave. - this is not a destination]
Norwood	[Opportunity to provide] Angled parking on wide portion of Chestnut [Street, ±475' in from Broadway]
Norwood/ Northvale	[Rockland Avenue] on-road connection for future [Boy] Scout mountain biking park
Norwood/ Northvale	[On Rockland Avenue north of the tracks] Driveway on Northvale side, parking on Norwood side blocks driveway
Norwood/ Northvale	[In vicinity of tracks between Dorato Place and Railroad Avenue] Flooding trench floods up driveway

Sketch Concepts Station

The Sketch Concepts Station was staffed by NV5. The exhibited consisted of four display boards that provided the following information:

- Existing Conditions: Assessment of existing conditions of the right-of-way that identified three distinct cross section conditions:
  - Full Width Available
  - Limited Constructible Width
  - Limited Width Constrained
- Concept A: Greenway & Linear Park
- Concept B: Shared Use Path
- Concept C: Rail with Trail

Meeting attendees discussed the concepts with NV5 professionals and were encouraged to provide input by writing their comments on sticky notes and affixing them to the display boards. A large pad was also provided to collect general comments.

Findings

This exhibit was not intended as a referendum to select a preferred concept. As such, the findings listed here should be understood as knowledge building/discovery to inform strategic advancement of greenway planning:

- Strongest support was expressed for Concept A.
- The prospect of keeping a railroad, as shown in Concept C, received a mix of support and opposition. This dichotomy will likely merit a targeted future planning effort to arrive at and document a consensus on approach.
- Little support was expressed for Concept B.
- The desire for separation of travel modes on the greenway was a common theme.
- The desire for safety and greenway operations was a common theme.
- Various comments were provided on furnishings, amenities, and materials that may be appropriate to incorporate in future planning/design efforts.

A record of the sketch concepts and comments collected is provided beginning on the next page.

A Greenway & Linear Park Concept A

Description

- Long-range vision developed by the Northern Valley Greenway Committee in consultation with the Municipalities, County, and extensive public outreach
- Robustly proportioned bicycle and pedestrian facilities to handle the expected heavy user volume from the community and surrounding areas
- Includes supporting facilities such as space for activity zones, park features, exercise stations, and emphasizes conservation (e.g. pollinator corridors)
- Enables joint strategies with local nature centers, area school systems, local health, wellness, educational and environmental organizations

General Assessment

Bicycle Level of Service (LOS)

- Rating of bicycle mobility on a scale of **A** (best) to **F** (worst)*

Cross Section	Peak User Volume (one-way users per hour) 100	250	400
1	A	A	A
2	A	A	B
3	A	B	C

Safety

- Excellent separation of user speed and mode reduces potential for conflict

Supporting Features

- Will include park facilities such as exercise stations, dog run areas, or gardens, sculpture, and more as components of a holistic design
- Separate pedestrian path reinforces a parklike atmosphere

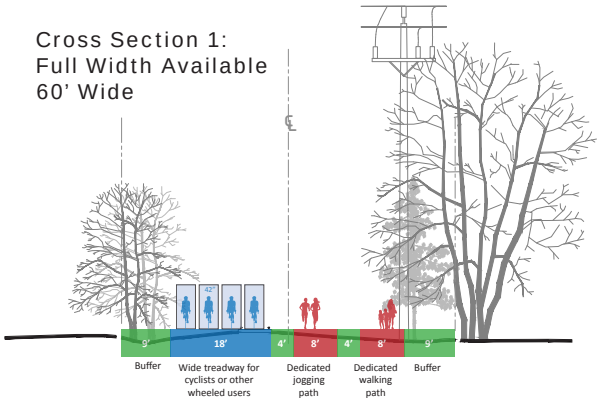
Environmental Considerations

- Runoff from paved areas can be mitigated through linear recharge swales and/or permeable pavement materials
- Sensitive areas (wetland or floodplain) will require minimization of impacts, which may result in narrower overall facilities or raised treadways in certain locations

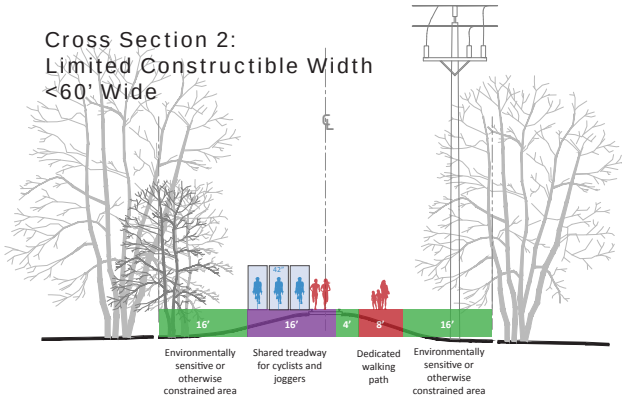
* Calculated using the Shared-Use Path Level of Service Calculator by the Federal Highway Administration, 2006, www.fhwa.dot.gov/publications/research/safety/pedbike/05138/

Example

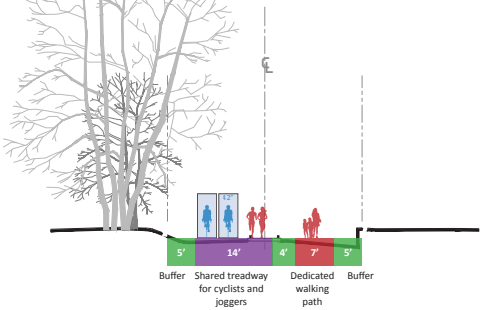
Cross Section 1:
Full Width Available
60' Wide



Cross Section 2:
Limited Constructible Width
<60' Wide



Cross Section 3:
Limited Width Constrained
25'-35' Wide



COMMENT HERE!

COMMENT HERE!

B Shared Use Path

Concept B

Description

- Basic shared use path designed to meet American Association of State Highway and Transportation Officials (AASHTO) standards
- Shared treadway with a mix of travel speeds and modes among bicyclists, joggers, and pedestrians
- Can be designed to account for future activity zones to be planned and developed independently

General Assessment

Bicycle Level of Service (LOS)

- Rating of bicycle mobility on a scale of **A** (best) to **F** (worst)*

Cross Section	Peak User Volume (one-way users per hour) 100	250	400
1	A	C	D
2	A	C	D
3	A	C	D

Safety

- Path users are not separated by speed or travel mode; there is potential for conflict or reduced travel speed
- Path is designed for shared use, and meets standards published by the American Association of Highway and Transportation Officials

Supporting Features

- Includes basic supporting features, such as benches and wayfinding signs at key locations
- Single path can emphasize the feeling of being in a corridor, rather than a destination

Environmental Considerations

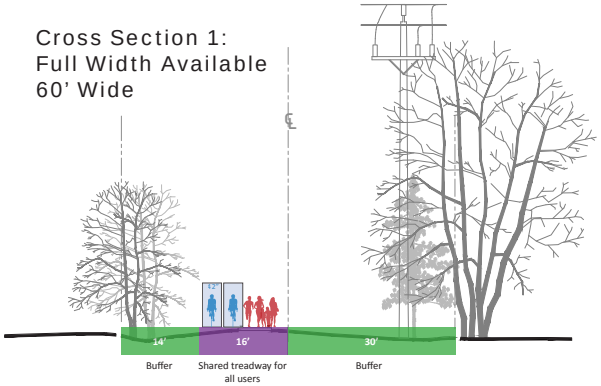
- Runoff from paved areas can be mitigated through linear recharge swales and/or permeable pavement materials
- Sensitive areas (wetland or floodplain) will require minimization of impacts, which may result in a narrower overall shared use path in certain locations

* Calculated using the Shared-Use Path Level of Service Calculator by the Federal Highway Administration, 2006, www.fhwa.dot.gov/publications/research/safety/pedbike/05138/

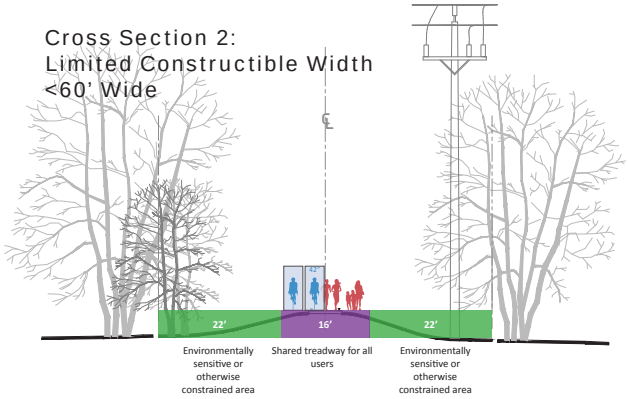
Example

Middlesex Greenway in Middlesex County, NJ

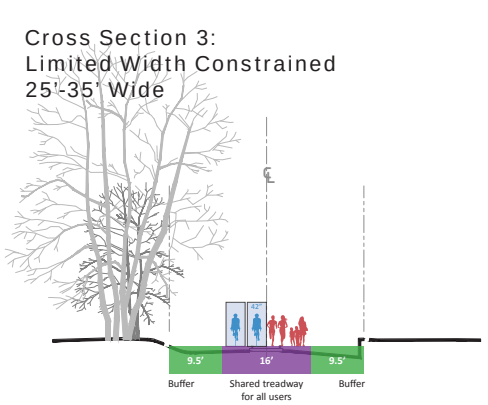
Cross Section 1:
Full Width Available
60' Wide



Cross Section 2:
Limited Constructible Width
<60' Wide



Cross Section 3:
Limited Width Constrained
25'-35' Wide



COMMENT HERE!

COMMENT HERE!

C Rail with Trail

Concept C

Description

- Preserve existing rail operations and construct a shared use path within margins of existing right-of-way, as available
- Shared treadway with a mix of travel speeds and modes among bicyclists, joggers, and pedestrians
- Cannot include activity zones in order to preserve rail operations

General Assessment

Bicycle Level of Service (LOS)

- Rating of bicycle mobility on a scale of **A** (best) to **F** (worst)*

Cross Section	Peak User Volume (one-way users per hour) 100	250	400
1	A	C	E
2	C	F	F
3	D	F	F

Safety

- Path users are not separated by speed or travel mode; there is potential for conflict or reduced travel speed
- Constrained areas of 8-10' wide are considered minimum acceptable widths

Supporting Features

- Does not include supporting features (park facilities such as exercise stations, dog run areas, etc.) in order to preserve operational space for railroad

Environmental Considerations

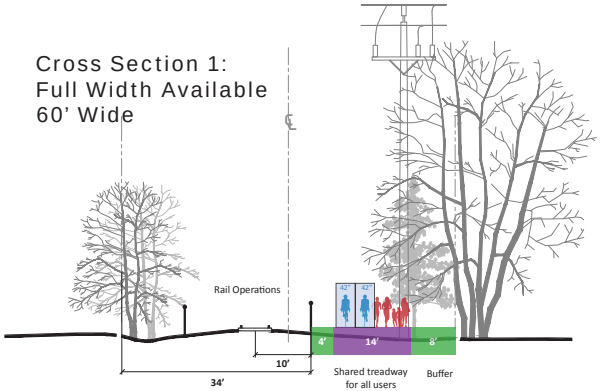
- Runoff from paved areas can be mitigated through linear recharge swales and/or permeable pavement materials
- Sensitive areas likely to require a pier-mounted linear treadway structure, which can be expensive and offers a low level of service

* Calculated using the Shared-Use Path Level of Service Calculator by the Federal Highway Administration, 2006, www.fhwa.dot.gov/publications/research/safety/pedbike/05138/

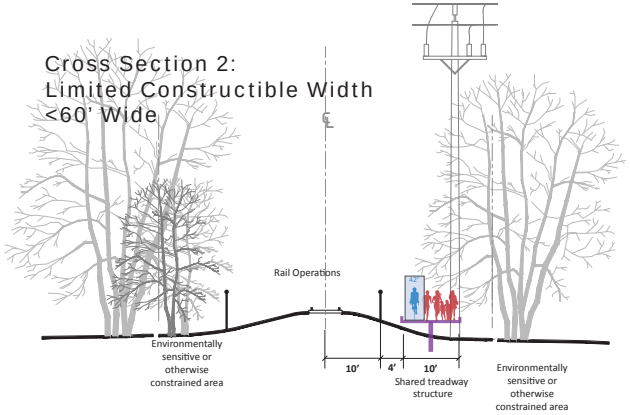
Example

Traction Line Trail in Morris County, NJ (Image source: traillink.com)

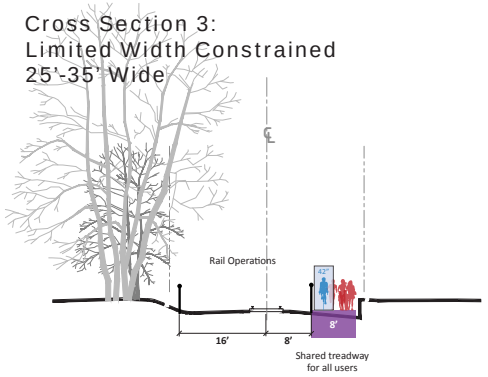
Cross Section 1:
Full Width Available
60' Wide



Cross Section 2:
Limited Constructible Width
<60' Wide



Cross Section 3:
Limited Width Constrained
25'-35' Wide



COMMENT HERE!

COMMENT HERE!

Sketch Concepts Comments (Page 1 of 3)

Concept	Comment
A	Best Idea Ever!
A	Safety First!
A	Concept A most visually & multi use appeal
A	People with or w/o dog need their own lane. Bikes need their own dedicated lane. Best option.
A	This is the best by far. Easy use for all citizens without dodging each other.
A	Best for safety - Cross Section [A-]1
A	Cross section # [A-]1 is best
A	More safety space for all people
A	This is the best plan for safety
A	[Concept] A lets everyone have their own section + resting space. I think it is the best option.
A	I occasionally run on the tracks because the ground is soft and good for my knees. Please consider building a path that is soft and not hard on the joints.
A	I prefer Concept A
A	[Concept] B keeps much more nature
A	This is the best!
A	I love this idea! I support Concept A!
A	Best concept regarding safety pedestrians vs. bikers
A	Love it! Best plan by far
A	[Concept] A all the greenWAY! :)
A	No! We need rail for inclement weather + non walkers -- get people out of cars!
A	Safe, scenic, would be an attractive recreational area & eco friendly
A	[Concept] A is the best option! Just separate joggers from dog walkers!

Concept	Comment
A	Option A - best multi use + a perfect linear park idea
A	I like Concept A the best!!! And [Concept] C second because seems least expensive
A	Concept A overall better than other ideas
A	[Concept] A is user friendly option. I like this
A	I think that this idea is super duper good!
A	[Concept A] Section 3 Best for property owners that are on the path
A	Good idea
A	The best concept!
A	I love this idea! This is the best idea!
A	Good idea!
A	I'm wondering about the privacy for the people living near.
A	Voting for [Concept] A Greenway & Linear Park
A	If you build it we will come!
A	Definitely option A!
A	I vote for the "A" concept!
A	Can we please use go-karts on the greenway too?
A	Separate cyclists from foot traffic for safety. Moms with kids on bikes go where? Dogs on leash don't combine well with bikes. THIS ONE IS BEST
A	Best
A	Environmentally Better - if there was no pavement
A	Great -- It is about time that this property is recognized + used for recreation!
B	Rail + Trail!
B	Yes! It's nice to have some nature on a bike ride.
B	Could see people and bicycles colliding. Like option A better

Sketch Concepts Comments (Page 2 of 3)

Concept	Comment
B	Concept A is much better!
B	No! We need a rail line for inclement weather + room for bikes!
B	Don't see the point in doing this. Option A is MUCH better !!!
B	Reasonable choice
B	Huge waste of available space. Lots of maintenance for grassy areas.
B	Keep in mind all the bikes, rides from Manhattan there a lot!
B	My husband says those road bikers [the ones associated with Manhattan] stay off of trails
B	Best choice… Conserves more trees, provides shade, more immersion in nature.
B	Dirt, gravel or paved walkway - 1 Rd. width wide. No fluff - no exercise stations, no gazebos. Just a walkway for all!!
B	This option wastes a lot of useful space. The "shared" treadway will be a messy collection of bikers, runners w/ & w/o dogs, walkers w/ & w/o dogs and strollers, esp. on nice days
C	The High Line in Manhattan kept the tracks and looks good!
C	Poor choice for all
C	Highline = great. Don't want to ride my bike along a train line.
C	This is what we really need. Rail + open space + bikes get people out of cars!
C	Rail would be under-utilized/$$ and is not needed
C	NO TRAIN. Tracks are an eyesore. Don't want a train going through town.
C	Hate this idea -- with all the NYC bikers using there - it will be dangerous for pedestrians. Need more width like in [Concept] A.
C	Ugly - not inviting. Rail have been dormant all this time this is not needed.
C	Yes to Rail & Trail

Concept	Comment
C	Incorporate parks in plan
C	Yes train all the way up & connect to NYC trains & Secaucus trains/
C	We must retain rail line as housing keeps expanding. Option C allows both greenway and future rail.
C	Incorporate light rail or trolly and walkway
C	Too many road crossings to keep rail. Plus, the fence would prevent wildlife from crossing
C	In any case -- opportunity for TRANSIT should remain
C	Single track rail is useless, go with option 'A' or 'B'
C	Concept C seems best for light rail but I still like [Concept] A
C	Like keeping rail
C	Don't destroy concept with rail -- TRAIL ONLY
C	Crowded! No use for rail if not a shuttle train
C	Don't like it. We are a quiet suburb and would like to stay one.
C	Nice to have this happen.
C	Concept A is much BETTER!
C	NO to rail. Too dangerous with bikes + pedestrians/
C	Rail no! Trail yes!
C	We need rail to save environment!
C	Path keeps corridor open anyway. Rail/bus could come back in 30/40 years. Get rid of track for now.
C	Yes for rail!!
C	Rail with trail THRU Englewood to Overpeck
C	As a Bike I want to take my bike on rail
C	Yes to rail -- need to preserve rail option
C	Must retain rail line for future needs

Sketch Concepts Comments (Page 3 of 3)

Concept	Comment
C	This is not what we need. Turn it all into greenspace for pedestrian use.
C	Rail to Northvale already rejected by 2008 DEIS Northern Branch Corridor Study. Also, too expensive.
C	Essential to preserve rail line for future use as well as the trail
C	Rail & trail combo best option to preserve critical recreation & transportation.
C	Combined transit option important for this project, definitely in favor.
General	This would be great for our towns.
General	I hope it can be accomplished as quickly as possible!
General	HBLR is a decade in…
General	Northern Branch L.R. is 20 years into planning, still 10 years from shovel in ground.
General	Will there be security cameras watching paths which are wired into local police stations for monitoring?
General	Will paths be plowed after snowstorms for winter bike & stroller use?
General	We need to maintain rail use along w/ bike walk -- people on light rail , not roads
General	Is CSX ready to give up right of way?
General	Must INCLUDE Englewood - Rail + Trail to Overpeck
General	Great! Anxious to see railway ready for use -- walk + bike
General	Good luck @ hope will happen fast!!! Can't wait
General	Just do something - enough talk (yes!!!)
General	Would love to see this connect to the Clarke rail trail in Orangetown, NY

Concept	Comment
General	We need more safe biking & walking options that are not mixed in w/ cars (ex: bike lanes on roads are often blocked w/ cars/trucks). Great idea!
General	Actually, we need a greater mix for safety, so bikes are EXPECTED by DRIVERS!
General	Will houses/property adjacent to existing tracks have high fencing installed for privacy?
General	At night will there be lights on walkway
General	Should be some [lights] but NO SPILL!
General	Will 911/emergency phones be installed in case of criminal activity
General	Will there be cameras?
General	Solar pathway markers
General	Many dead end streets abut the track, will these streets have fences for no entry? As parking on those streets are very limited. Those residents will be trapped in their own driveway.
General	Many areas of the proposed walkway are in flood zone. What is the sewage plan.
General	No! To Rail!
General	Bathrooms & water fill stations
General	Amazing! Do it soon!
General	Dog water fountains
General	Train all the way up.
General	Fast biking before 8am so slower family time after, no crashes
General	Will there be water features & water fountains (for drinking & pets?)

Traffic/Crossings Station

The Traffic/Crossings Station was staffed by NV5. The exhibit consisted of four display boards that provided the following information:

- Crossing Overview:
  - 17 crossings identified by name, location, jurisdiction, presence of signals
  - Typical Crossing Type A: Mid-Block
  - Typical Crossing Type B: Parallel Roadway
- Crossing Toolbox 1 (unsignalized crossings)
- Crossing Toolbox 2 (signalized crossings)
- Crossing Toolbox 3 (grade separated crossings)

Meeting attendees discussed the crossing conditions and toolboxes with NV5 professionals and were encouraged to provide input by writing their comments on sticky notes and affixing them to the display boards.

Findings

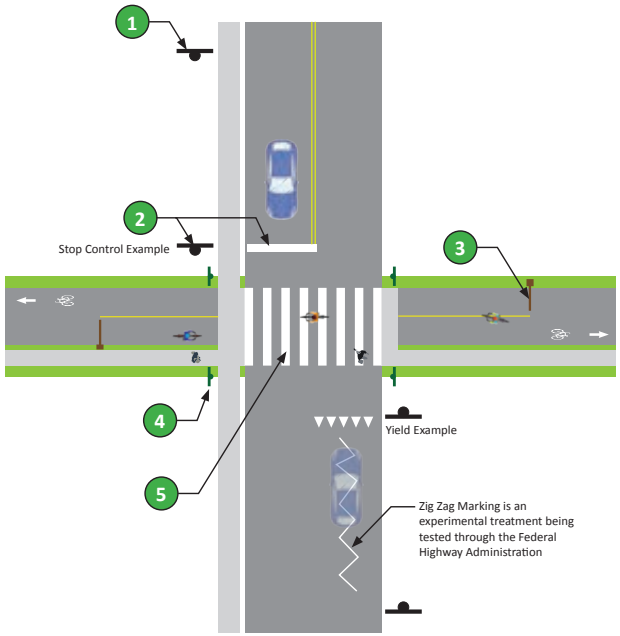
This exhibit was not intended as a referendum to select traffic controls at roadway crossings. As such, the findings listed here should be understood as knowledge building/discovery to inform strategic advancement of greenway planning:

- The palette of design treatments in Toolboxes 1 and 2 was generally accepted with some caveats regarding a need for safety, good lighting, and concerns about overall traffic congestion.
- Grade separated crossings (Toolbox 3) received a mix of support and opposition, with some attendees expressing a desire to "start small" and others seeing value in grade separation.

A record of Crossing Toolboxes 1-3 and the comments collected is provided beginning on the next page.

CROSSING TOOLBOX 1

EXAMPLE:
TYPICAL MID-BLOCK CROSSING



1 Advance Warning Sign ±150' ahead of crossing

Advance Warning Sign

2 Range of Traffic Control Options on roadway at crossing location

Advance Warning Sign

Yield Sign

Stop Sign

Flashing Signals/Beacons

HAWK Signal

3 Gates

Gates create a physical barrier to alert, slow and/or control greenway users at roadway crossings and prevent unauthorized vehicle access. Gates are highly configurable to a range of looks and finishes.

4 Traffic Control Options on greenway at crossing location

Intersection Warning Sign

Yield Sign

Stop Sign

5 Crosswalk

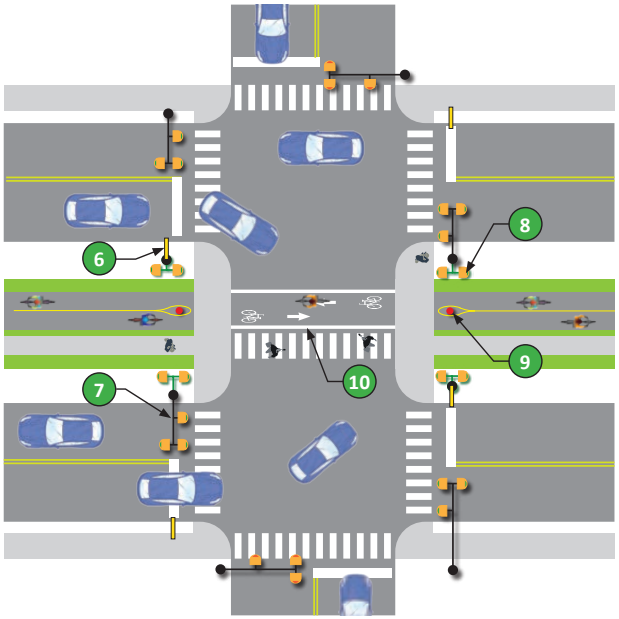
High Visibility Crosswalk

Crosswalks are configurable in a wide range of materials and appearances.

COMMENT HERE!

CROSSING TOOLBOX 2

EXAMPLE:
TYPICAL SIGNALIZED PARALLEL ROADWAY INTERSECTION

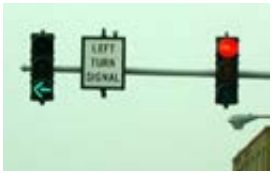


6 Advance Warning Sign

Modified W10-2 Sign
Advisory Only

7 Signal Phase Modification Options

Prohibit Right-Turn-On-Red
Can reduce conflict between right-turning vehicles and greenway travelers



Protected Left Turn Phases
Can reduce conflict between left-turning vehicles and greenway travelers

Dedicated Greenway Phases or a Leading Pedestrian Interval (LPI)
Can dedicate a signal phase or a portion of a signal phase to greenway travelers only

Signal Actuators
Can be converted for time control on Shabbat

8 Signal Heads for greenway users

Bicycle (or standard) signal heads are oriented to greenway users and improve dedicated signal phasing applications

Countdown signals inform all travelers when the signal will change

9 Bollards

Bollards create a physical barrier to alert or slow control greenway users at roadway crossings and prevent unauthorized vehicle access. Bollards are highly configurable to a range of looks and finishes.

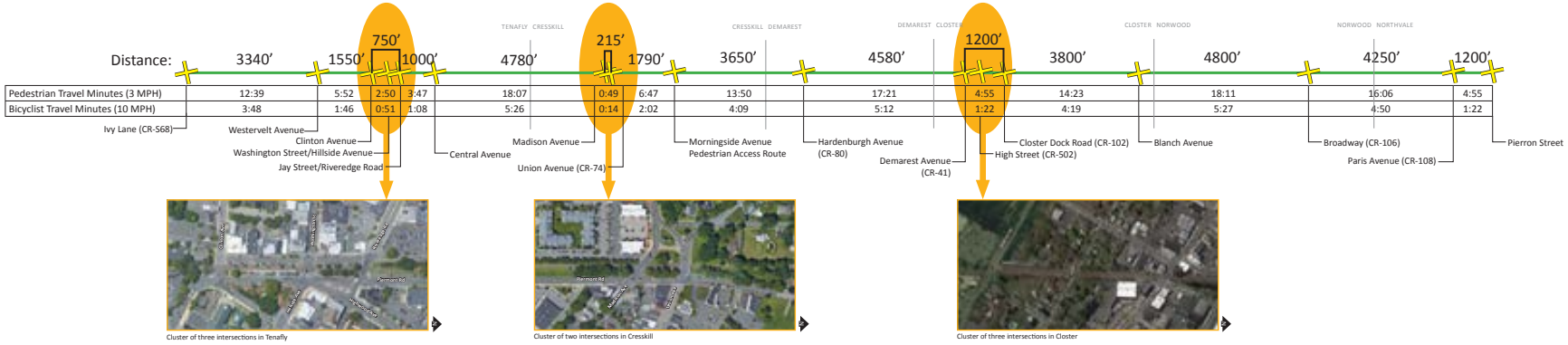
10 Crosswalk/Crossbike

Crosswalks with adjacent Crossbikes are configurable in a wide range of materials and appearances.

COMMENT HERE!

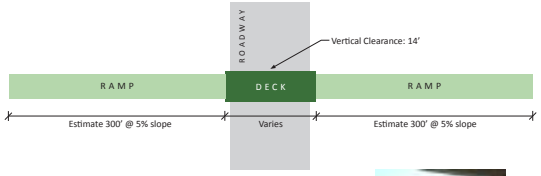
CROSSING TOOLBOX 3

ANALYSIS: DISTANCE BETWEEN CROSSINGS

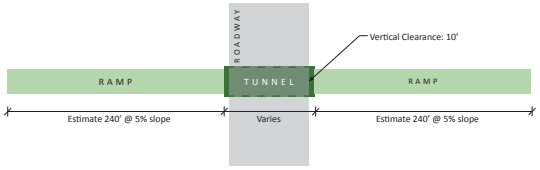


QUESTION: WOULD YOU CONSIDER GRADE SEPARATED CROSSINGS? IF SO, WHERE?

BRIDGE/OVERPASS



TUNNEL/UNDERPASS



Note: Helical or switchback design solutions can be employed to provide access to bridge or tunnel structures in accordance with the Americans with Disabilities Act. Such solutions would reduce the land area necessary to achieve estimated 240’ to 300’ ramping requirements.

COMMENT HERE!

Traffic/Crossings Comments

Toolbox	Comment
1	Cars should have priority over bikes
1	I like Toolbox 3 but Toolbox 1 seems most cost efficient
1	Gates must be openable for light rail
1	No flashing signals -- too busy!
1	Combo of Toolbox 1 & 2
2	Lighting at congested crossings!
2	Tunnels are expensive. Let's start with little and consider bridges/ tunnels later
2	At busy grade xings good visibility btwn cars + trail
2	greenway, not road, should have priority - rail is important
2	[bollards are] not compatible w/ rail
2	Install pedestrian stoplights at vital intersections like Madison Ave. [in] Cresskill
2	Lights & barricades @ road crossings make it safer!
2	Overuse will create traffic in downtown areas

Toolbox	Comment
3	Like the idea of starting small. Toolbox x-ing 1 +2 first, overpass later
3	Traffic lights ARE BETTER. No tunnels - overpasses would be too steep
3	NO TUNNELS
3	No tunnels (I agree)
3	No Tunnels
3	Overpasses preferable by far
3	Crossing needed at Demarest Swim Club
3	Overpass only
3	No tunnels - it attracts punks & homeless people making it unsafe.
3	Make people & animal crossings both can use to help limit road kill. Solar lighting (agree).
3	no tunnels, no overpasses
3	Yes. Either tunnel or bridge would be fine & maybe differently appropriate depending on terrain
3	Overpass preferable

Comment Form Station

The Comment Form Station was centrally located in the meeting room to solicit general comments on the study. On the comment form, participants were asked to provide their name and municipality.

Findings

The following themes recur through the comments collected:

- The most prevalent theme was general support for advancement of the Northern Valley Greenway.
- Concept A received strong support.
- No comments were submitted expressly in support of Concept B.
- A dichotomy between expressions of support and opposition to rail was collected in similar proportion to input collected in the Sketch Concepts Station, indicating that there it will likely be valuable to future planning efforts to achieve and document a consensus for advancement.

- The desire to understand parking, access points, and how the greenway will relate to neighboring/adjacent residential properties and streets was a common theme.
- The desire to understand greenway operations and separate greenway travel modes was a common theme.
- Various comments related to desired furnishings, amenities, and materials were collected.

The comments are transcribed in the table that follows.

Comment Form Responses (Page 1 of 5)

Municipality	Comment
Demarest	Greenway is a wonderful and positive development for our neighborhoods. I can't wait. Keep up your good work
Closter	The Greenway should lend itself to include Historic signage as well as signage for the flora.
Closter	Dirt/gravel or paved roadway like already existing. No gazebos, no exercising stations necessary - more expensive + maintenance later on. Can be paved in section as $ becomes available. Just get us walking safely and connected at Tappan. I've been on existing many times and it's awesome!!! Make it simple and get it done. Benches can be donated in memory of. That's all
Closter	Would prefer to see Concept "C" Rail with Trail
Closter	"According to resolution it states ""to jointly accommodate future light rail…"" I cannot get behind any light rail in conjunction with a greenway. In NYC, we walk the Clark Trail. No light rail & we love it!"

Comment Form Responses (Page 2 of 5)

Municipality	Comment
Closter	"1) Has there been any thought behind connecting Greenway to major transportation hubs of mass transit? 2) Any plans to designate a lane/times for when riding an electric bike would be permissible on the NVG (ex. On weekdays from 7am-10am & 3pm-6pm) 3) To maintain Greenway, will there be space to rent to vendors (food, musicians, artists, etc.) Money collected would be used for wear and tear."
Closter	I love Concept C but I think Concept A while not as attractive seems the most cost efficient AND most likely to be adopted for light rail. I love tunnels or overpasses at crossings because it seems safest but also seems most costly, tunnels are better for wildlife I think. JUST DO IT!
Closter	Start soon before costs increase.
Closter	Would love to keep the option to bring light trolley or rail even after Greenway is built. Option C seems too narrow to accommodate to there walkers + bikers. I would have liked the placards on the stands to all show the route illustrated at the top of placard so I could see where and how each option, various crossings etc. would be located. I would prefer some obvious delineation or separation between bikers + walkers if at all possible, perhaps painted lanes?
Closter	Start the project ASAP - even if it's most basic concept - just start
Closter	How can my organization help? I help coordinate the Closter 5k on Labor Day Weekend. We've got a platform - Facebook Page - that can help spread the word about the Greenway + build support!

Municipality	Comment
Cresskill	Years from now the transportation needs of the area will demand a light rail to the state line. It would be important to share the right of way.
Cresskill	Great idea and concepts. Is CSX ready to give up right of way? Seems there are still potential customers
Cresskill	"Great presentation! Congratulations for the # of people here! Concern - How to prevent large # of bikers from NYC using the greenway, making it too crowded/overused for local families? Eric gave me good response but still a concern to be considered. Thank you for all you are doing!"
Cresskill	Great Idea. Looking forward to the Greenway + the use of the path for outdoor exercise (walker + biker). Hope it gets off the ground soon!
Cresskill	"Many areas of walkway are in a flood zone, what is the sewage plan? - Will houses/properties adjacent to track have high fencing installed for privacy? - During evening hours will there be lights on walkway? - Will 911/emergency phones be installed in case of criminal activity? Will there be cameras? Many dead end streets abut the track, will these streets have fences, for no entry? As parking on these streets are narrow and have limited parking, those residents will be trapped in there own driveways. For example - Meadow Street Cresskill, NJ"
Cresskill	Piermont Rd in Cresskill, sewer lines run west towards RR track main.
Cresskill	Rail s/b kept & extended side by side with bike/hike trail. Rail & Trail are compatible.

Comment Form Responses (Page 3 of 5)

Municipality	Comment
Cresskill	I am concerned about parking - I live in Cresskill on W Morningside - there is a pedestrian cut through to the HS. My street is very quiet except at school arrival + dismissal. Will my otherwise quiet street become busy as people park to access the trail? Also concerned about flooding - paving won't help. And do not want any trees removed.
Demarest	The Demarest Athletic Association is working on a walking/athletic path around Wakelee Field. We would like to make a physical connection to the Greenway. We would appreciate the opportunity to discuss.
Demarest	Great Super! Make it just like the High Line in Manhattan! Keep the tracks, use native plants, keep it simple and it will boost economic activities in all the towns and bring charm & community to Demarest
Demarest	I live part time in Denver where they developed an extensive trail/path system. So some things that really work there: signage + well lit in populated areas; under passes to avoid street crossings; tools + pump stations. Last: allow business to develop near the trail (coffee, restaurants, bar for social + community aspect). Great idea + can't wait to use this!
Demarest	This is a wonderful idea and I hope it can be accomplished quickly! My hope is that if and when it is constructed that it results in a minimal impact to the surrounding natural beauty around it.
Haworth	I think this an amazing use of abandoned rail. As an adjacent town, I know Haworth would benefit from the promotion of an active lifestyle. This is a great idea.

Municipality	Comment
Haworth	Simplicity is key for me. I am a runner. I don't understand why this great idea needs to be complicated with separate lanes for walkers, runners and bikes. I frequent the Joseph Clarke trail and everyone gets along together on the same path. Also, no need for extra bridges and such. Use your brains and watch the traffic and cross with common sense.
Haworth	I really would like the path to be more eco-friendly - gravel… NOT CONCRETE OR ASPHALT. Please better for joggers legs + more fun to ride, better for dogs…
Haworth	Love Concept A! Have areas for tools/pump. Overpass or tunnel would be nice. I think there is opportunity for businesses like coffee shops, restaurants etc. Keep this going we need green space like this!
Haworth	We should still consider the light rail system. Why not elevate the RR crossing in Tenafly so it does not impact their traffic and cause congestion in town? Why does one town have more power than another determining the fate of a multitown transport line? Maybe Haworth should limit water from our reservoir because we want to keep if for ourselves.
Hillsdale	Where are there going to be parking areas for those who come from beyond the immediate area? If possible, parking spaces should be a litter wider/longer than typical to facilitate unloading/loading bikes. Especially at heavier trafficked cross streets Greenway should go over street, not at grade
Northvale	NV Greenway is a great idea. It should be executed in a way which minimized future taxpayer burden and environmental impact. I think it will be positive for local residents and businesses alike.

Comment Form Responses (Page 4 of 5)

Municipality	Comment
Northvale	I personally think we should not make this. If we don't have money in the middle of the process, honestly, we just made a huge waste of privacy too, also concerns me. For example, I live in Northvale, and I live right at the railroad border. If it gets busy there, it just seems like a bad choice. I think there should be at least a fence over the railroad.
Northvale	" - How will parking be managed on dead end streets that abut the trail? - Will it be illuminated - hours of operation enforced? - Will there be police call boxed - how often patrolled? - Will there be fencing along the trail & home properties? - Rockland Ave has bad drainage & mosquito problem - will these be addressed? - Will motorized vehicles be permitted (ATV's, trail bikes)"
Old Tappan	Looks good, however, I want light rail so as long as it does not negate the possibility of the light rail extending through these towns I support it.
Orangetown, NY (Pearl River)	Is any though being given to connecting with Joseph Clarke rail trail?
Ramsey	I think this (path) is a great idea! Install call boxed for help, adequate lighting, water fountains, barriers @ road crossings and separate lanes for cyclist & walkers/ runners. It would be great to connect the path with other paths. Bergen County has lots of small paths that don't connect to other areas.

Municipality	Comment
Tenafly	The public information center was very informative. Bergen County needs more a green space and trails. My wife, Melinda and I drive for 90 minutes to hike on the rail trail up in New Paltz NY. We would very much welcome a trail running through our towns. We would then spend more time walking and less time driving. This trail would also create more opportunities to walk/ hike and ride our bicycles, since it would be close to our house. Let's get it done!!!
Tenafly	" - Speed monitoring at all crossings - Trash compactor(both hand wired or solar power)"
Tenafly	Billboard slid show of proposed path to increase awareness
Tenafly	Concept A is much more desirable. Hope this can work out. Let's do it right!
Tenafly	I am aware there are many hurdles to make this happen, but I imagine funding is a MAJOR one! As this would be an improvement to each of the towns, is there support for municipalities to kick in to support this? As a resident + taxpayer, I would support this even if it meant an increase in taxes. This is an initiative worth supporting! Thanks for doing this!
Tenafly	Proper Prior Planning Prevents Poor Performance. This is a worthwhile endeavor!! Thank you
Tenafly	My husband and I presently go to the New Paltz, NY area and walk on the Wallkill Rail Trail. It brings us much joy being with nature. I would like to have a rail trail nearer to where I live.

Comment Form Responses (Page 5 of 5)

Municipality	Comment
Tenafly	Love Concept A as the most aesthetic + eco friendly. The concept encourages people to walk, take in the scenery, + explore the towns involved. Concept C (RW/T) is ugly + I don't see the point since the rails have not been used in years. Concept B (Shared) has a liability involved where pedestrians (esp. w/children) could collide with bicycles. If it comes to a vote, I endorse Concept A.
Tenafly	I am a strong supporter of the Norther Valley Greenway and like Concept A the best (Greenway and Linear Park). I think that the shared use path (Concept B) is not a good idea as it sounds like it will cause congestion. I love to walk and am greatly looking forward to enjoying the Greenway with my wife.
Tenafly	No to rail - yes to trail
Tenafly	I feel that the A plan would meet the needs of the community in the best way.
Tenafly	The A Plan seems to meet most of the recreation requirements desired by the affected communities.
Waldwick	A fine opportunity to provide Bergen County residents with a recreation (and transportation) portal. The wider approach will be safer for all users also enabling wheelchair users to coexist with cyclist and skaters. I would like to see pressure plate traffic light activation, and flexible (pivoting) bollards instead of dangerous fixed stations.
Westwood	Trail keeps vital corridor open. If in the event of crisis (e.g. Sandy), emergency services could use trail to Englewood Hospital - Light rail station. Good selling point to municipality.

Municipality	Comment
Woodcliff Lake	The Lackawanna Coalition supports a combined light rail/bike path - emphasis on rail, double-tracked if possible. Light rail is accessible to all, particularly in inclement weather, it is the wave of the future. It gets people off congested roads, cuts greenhouse gases and move more people more safely. Combining bike + rail makes biking more accessible. If one tires or weather changes, or you have too many packages from shopping, you can hop on a train. We need both!
	I would like to see exposed RR track (similar to the High Line, NYC) to connect past with present and future planning

Other Comments Received

In addition to the comment forms collected at the Public Information Center, email comments were also received and are recorded in the following table.

Email Comments Received Prior to Public Information Center (Page 1 of 1)

The following comments were submitted to NJDOT prior to conducting the Northern Valley Greenway Public Information Center:

Email #	Municipality	Title	Email Date	Message
128190001	Unknown	Resident	1/28/2019	Although a walkway sounds nice, how about expanding the Bergen Hudson Light Rail instead. The NJT is beyond crowded and the buses go to NYC first before Hoboken. This plan just means more taxes and long commute times. Thanks for thinking of the commuters."
225190001	Englewood Cliffs	Resident	2/25/2019	I find it sad these affluent communities, with residents saying they care for the environment, have the desire to support this project. I am disappointed it has gotten this far. It will be an environmental disaster as this will prevent the most efficient form of transportation to return to these communities; rail. I am dead against this so called Greenway. Rail can be used not only for transporting people, but for removal of recyclables and delivery of goods. Please know that as a resident of one of the surrounding communities, I am against this initiative!"
227190001	Not applicable	NJDOT	2/27/2019	***Response to message # 225190001 from NJDOT:*** Thank you for your comments. The project is in the concept development phase, and nothing has been firmly established yet. One of the alternatives would be to develop the trail alongside the rail path to permit combined use. We are examining all possibilities, and will be taking comments from all sides of this issue. Your e-mail has been forwarded to the project team. If you have any further questions, please don't hesitate to contact me."
228190001	Englewood Cliffs	Resident	2/28/2019	***Response to message # 227190001 from citizen:*** Thank you for your email. I felt compelled write - the thought of the rails going away was very upsetting - your correspondence has settled me down a bit. Certainly through Tenafly the right of way is plenty wide. The local paper recently published my suggestion to utilizing the rails for removal of municipal recycle. Creative minds, I hope, can think of out of the box ways to use the line to the benefit of all residents! Best of luck!"

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On March 16, 2019, the Northern Valley Greenway committee sent an email follow up to their database of contacts to solicit additional comments related to the Northern Valley Greenway Public Information Center. The message from the Northern Valley Greenway committee invited the following:

"**March 5th NJDOT Public Information Center session**

Thank you to all who were able to participate in the March 5th NJDOT open house. It provided the public's first look into the details of the planning study and the design alternatives being considered. The study results are scheduled to be available by May, we will communicate further details then.

For those of you who could not make it, but would like to comment, there is still a limited window to provide input to the project team. Statistically, people with questions are far more likely to comment than those that are happy with the NVG strategy. Every comment counts, if you wish to comment, please email it THIS WEEK to ensure receipt by the March 19th deadline...

We would like to thank the NJDOT and the NV5 consulting team who provided a professional and highly informative session. We had a good turnout and the feedback has been very positive and supportive. Below is a letter from one of the attendees to his community and links to various press articles.

We would also like to thank the leadership of the Northern Valley Regional High School at Demarest and the Northern Valley School System, the local Rotary Clubs, the Bergen County Sheriff and the Demarest Police for enabling a very successful session! We appreciate the support and participation of numerous local and state elected officials and the County of Bergen, NJ Transit, NJDOT, NJTPA, MTA, Orangetown, NY, EZ-Ride TMA and others who joined and gave their support and feedback.

We are grateful for all the community, municipal, county and state support coming together to enable the Northern Valley Greenway. Please do not forget to express your support and appreciation to our volunteers for their time, energy, support and dedication throughout this journey. As they say, it takes a village, though in this case it is taking the wonderful, dedicated members of the Northern Valley Region to keep the momentum going!"

The following table includes comments received subsequent to the above solicitation. The comments expressed general support for the Northern Valley Greenway initiative. Concept A, in particular, was repeatedly identified as a preferred conceptual design solution.

Email #	Municipality	Title	Email Date	Message
316190001	Norwood	Resident	3/16/2019	I was unable to attend the meeting on March 5th but had a question regarding the trail where homes border it directly. I live on Railroad Ave in Norwood and my house faces the Railroad. I Was wondering if my street will be lined with tall trees or some kind of fence so we maintain privacy on our street. I love the idea of cleaning up the Railroad, but want to make sure our street maintains privacy and I'm not visibly able to see people constantly walking in front of my home. Thank you in advance for getting back to me!

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Email #	Municipality	Title	Email Date	Message
316190002	Tenafly	Team Leader - Northern Valley Greenway	3/16/2019	I did not have the chance to comment at the NVG session. As a resident of Tenafly, I also wish to express my preference. Please put me down as a supporter of Concept A, the full width alternative.
318190001	Clifton	Resident	3/18/2019	I am writing to provide positive feedback to the NV Greenway study you presented recently in Demarest. The NVG through it's community access should spurn a positive economic impact to the northern valley. Your study clearly inventories the assets and provides a focus and path to unlock a new recreational opportunity to the thousands of residents in the area. Thank you for providing the insights.
318190002	Clinton	Resident	3/18/2019	While I am not a resident of the Northern Valley, I do visit the area frequently. I am looking forward to being able one day ride my bike from Closter up to Nyack on the new trail. From what I have seen of the proposals, I think Concept A would be the best use of space. Thanks.
318190003	Clinton	Resident	3/18/2019	While I was unable to attend the information session, I am familiar with the three concepts for the trail. My preference is for Concept A. While I no longer live in the area, I do still own property in Closter. As a former Councilman from the Borough, I think Concept A will be best for the communities and for property values. I hope the state will support Concept A.
318190004	Closter	Resident	3/18/2019	I am a new resident and homeowner in Closter NJ. I am reaching out to show support for CONCEPT A of the Northern Valley Greenway. Not only will it best serve a dense population of bicyclists who frequent the world class cycling destination of Bergen County, the wider shared pathways and buffers will offer the safest execution to avoid excessive accidents. Imagine a sunny, crowded day on the path, one simple fall could lead to many injured if there isn't enough space to get out of oncoming bike traffic. As a commuter to NYC I will value the access that this path will provide to Tenafly's bus terminal and to Englewood Hospital. I'm originally from South Jersey, where Route 38 and 295 are crowded and bustling during the holidays, with no other way to get from town-to-town. When I got a new gig in NYC, I was looking for a place in North Jersey and was immediately was drawn to the comradery of these Bergen County towns. This pathway perfectly amplifies the communities' strong neighborhood values and commitment to leaving a better world for the next generation to embark.
318190005	Closter	Resident	3/18/2019	I fully support the northern valley greenway, specifically plan option A where the tracks are removed. The greenway is important to me because it would enrich Closter in so many ways. It will benefit the local businesses in town. Most importantly to me, it will enhance and enrich the community by creating a safe place for individuals and families to bike and walk . I truly believe it will help so many people of all ages. It is a place which will bring our community together in an natural setting. Please support this amazing cause.

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Email #	Municipality	Title	Email Date	Message
318190006	Closter	Resident	3/18/2019	I am a Closter, NJ resident. I am also an avid road bike rider. I can tell you firsthand that riding a bicycle on local streets, County roads and particularly Route 9 is dangerous. Colorful clothing and bike lights during the day have not stopped me from having close calls. There are inadequate shoulders on the roadways and automobile drivers simply do not see cyclists even when they wear bright colors. Sometimes two way traffic forces drivers to stay close to the shoulder were the come too close to bike riders. I strongly support the Northern Valley Greenway, and specifically the Plan A Option, where the tracks are removed. This idea of a dedicated public space presents a pragmatic solution which greatly alleviates this problem. Further, it may be enjoyed by families, ornithologists, joggers and walkers. If there is not enough room for all types of activities on the Greenway at once, Riders can be limited to certain times of the day just like on the boardwalks of New Jersey, so that pedestrians may have exclusive use of the Greenway during other times. I would greatly like to see this idea succeed. It will be a useful alternative to an unused rail line. It will greatly benefit the public, with little to no downside. It can generate more business for the towns along the way and can reduce accidents and deaths.
318190007	Closter	Resident	3/18/2019	I live in Closter and I'd like to express my support for the NV Greenway, and plan option A, which includes removing the tracks. This is the safest for our family and best option for our town.
318190008	Closter	Resident	3/18/2019	I live in Closter, and I would like to express my support for the Northern Valley Greenway, and specifically Plan Option A, where the tracks are removed. I am very excited to have this project come to fruition. This path would be great for bringing business to Closter, while allowing a safe place to bike and walk in town. This is a great idea and cannot wait to have it come to town.

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Email #	Municipality	Title	Email Date	Message
318190009	Closter	Closter Recreation Parks Director	3/18/2019	As a life long resident of Closter for 59 years and Recreation Parks Director for the past 22 years, I would like to voice my support for Plan OPTION A of the Greenway Project. The need for areas to walk, ride bicycles, jog on a rural, scenic route is much needed in our community and surrounding communities. Having enjoyed the paths up in Rockland County which I envision the Greenway project to mirror- would be one of the greatest additions to suburban life in Bergen County and would be used by countless residents in each town. I strongly suggest Option A and see no need to include the current railroad tracks (which haven't been used for quite some time) in the plans. Hoping that this path/trailway will come to pass in the coming years.
318190010	Cresskill	Resident	3/18/2019	I wanted to reach out to you to share my thoughts on the NVG project that is proposed to run through my home town of Cresskill, NJ. I am very excited to have this project come to fruition. I was able to review the information on the project and feel that Option A is the best option for our area. The train tracks have never been used in the 12 years I have lived in town. They continue to become more dangerous as they are broken and there is garbage along the tracks. This path would be great for bringing business to Cresskill and to allowing a safe place to bike and walk in town. This is a great idea and cannot wait to have it come to town.
318190011	Demarest	Resident	3/18/2019	I am writing to publicly comment on the northern valley Greenway project. I believe the Greenway should be built and will be an amazing step forward for our communities. There are so many benefits that I can see being derived from this, including better fitness for the community, better local commerce for restaurants, bars, and stores providing tax revenue, better commuting options and better quality of life overall. All of these things result in higher property values, and continued ancillary investment in our communities that will only multiply these benefits. Thank you.
318190012	Demarest	Resident	3/18/2019	I have lived in Demarest for the past 25 years and have never been more excited about a project than the Greenway! We are in need of some rehabilitation to the railroad track area and could always use some more greenery. I had to work the night of the meeting at NVG but wanted to express my excitement for something of this caliber in our community. Hope it comes to fruition in the near future. Thanks for your time-

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Email #	Municipality	Title	Email Date	Message
318190013	Demarest	Resident	3/18/2019	I am writing in support of the Northern Valley Greenway project. The Greenway will be a boon to our community. Bringing a new bike and walk path to what is currently a unused, unsightly and unsafe rusty track would be a wonderful way to breathe new life into the vibrancy of our towns. Please support it! Thank you.
318190014	Demarest	Northern Valley Greenway	3/18/2019	Thank you for attending the info event a few weeks ago. My family and I are huge advocates of getting the multiuse path built. It would be a dramatic enhancement to the area for all of the surrounding towns. We use the Joseph b Clark trail all the time - and spend way too much at Louie's ice cream stand in blauvelt. There was some confusion with the options - we didn't think a railline was even possible given the needed expense to serve these towns. I don't see how the cost can be justified to serve the relatively few who would end up using a train. New Parking garages/new lots - would be a horrible change for the landscape. A multi-use path would be a wonderful asset for the northern valley. Thank you again in helping to make this happen-
318190015	Demarest	Resident	3/18/2019	I am a resident of Demarest,NJ and just wanted to send you a note that we really liked Concept A that was presented. We hope this can be approved and we will get to utilize the bike/walking greenway. This will not only reduce traffic in our area but will also improve health and well being of area residents.
318190016	Demarest	Resident	3/18/2019	I am writing in support of the plan to convert the Northern Valley railroad in Bergen County into walking and running paths for our community. I am excited at the prospect of people in my town of Demarest being able to walk or run or ride to nearby Closter or Cresskill without having to travel alongside the very busy Piermont Road. I just hope it can be completed in time for my 7 year old to be able to take advantage of it before she heads to high school. This would be a healthy, safe change for Demarest and the other towns along the tracks.
318190017	Haworth	Resident	3/18/2019	I live in Haworth and I would like to express my support for the Northern Valley Greenway, and specifically Plan Option A, where the tracks are removed. I am very excited to have this project come to fruition. This path would be great for bringing business to Closter and surrounding towns, while allowing a safe place to bike and walk in town. With distracted driving becoming an epidemic, I'd like to build a safe place for my daughter to enjoy the outdoors.

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Email #	Municipality	Title	Email Date	Message
318190018	Rockleigh	Resident	3/18/2019	Our family is extremely excited about the possibility of having an amenity like this in the neighborhood. Please note our strong preference for option A (with B as second choice). We are prepared to be involved in whatever capacity we can and rally the Rockleigh community in support!
318190019	Tenafly	Resident	3/18/2019	Just a quick note for VERY ENTHUSIASTIC support for the rail trail option as proposed A. Hoping the Greenway gets a Green light ASAP!
318190020	Tenafly	Resident	3/18/2019	I am writing to voice my support for the Northern Valley Greenway Concept A. It is well thought-out and addresses the needs of the communities it will serve by providing areas for recreational activities, linking to town amenities, and creating conservation opportunities. I whole-heartedly support this plan and look forward to its implementation.
318190021	Tenafly	Team Leader - Northern Valley Greenway	3/18/2018	***Response to message # 316190001 from Northern Valley Greenway Team Leader:*** I think your question at this stage is more for the project team, I'm sure Anthony will comment as appropriate. We are aware of some of the challenges the boundaries present, both for people and businesses near the Greenway and for those directly on the Greenway. Our plan is to apply for sufficient funding to have a reasonable boundary coverage program. The details are further down the road, but your concern is definitely on our radar. Keep track of our progress and please make sure we don't forget this area!!!!
319190001	Closter	Resident	3/19/2019	I live in Closter, and I would like to express my support for the Northern Valley Greenway, and specifically Plan Option A, where the tracks are removed. I am very excited to have this project come to fruition. This path would be great for bringing business to Closter, while allowing a safe place to bike and walk in town. I have three small children and a dog. We love to walk and bike ride and this would provide a safe place for us to do this together. This is a great idea and I cannot wait to have it come to town.
319190002	Closter	Resident	3/19/2019	I support Concept A that was presented recently for the Northern Valley Greenway. As a resident of Closter and a real estate agent in the Northern Valley, I think it will enhance the quality of life in our area.
319190003	Closter	Resident	3/19/2019	Living near the proposed Northern Valley Greenway, I find that option A is the best proposal for the trail being the safest for both bicyclists and pedestrians. I hope you select that option. Thank you.

Email Comments Received After the Public Information Center (Page 7 of 9)

Email #	Municipality	Title	Email Date	Message
319190004	Closter	Resident	3/19/2019	I fully support the proposed NV Greenway initiative and Concept A. For may years I have lived in Closter, NJ just off the rail tracks and I feel they are an unsafe eyesore to all the communities they travel trough. Lately you can see trash and debris on the tracks including dangerous shards of glass and metal...this is dangerous to playing children who may venture on the tracks from an adjoining property and the dogs people walk over the racks. Thank you for working with the towns in the Northern Valley to make this trail a reality for all of our residents and guests to enjoy!
319190005	Cresskill	Resident	3/19/2019	I support the Concept A proposal. Living in Cresskill I would greatly like to see this proposal go ahead full speed to bring safety and a recreational corridor to this area. I live around the block from the scene of a tragic accident where a little boy was struck and killed by a truck a few years ago which could have been averted had there been a safe place to ride his bike which this Greenway could provide. Please consider this a plea for sanity.
319190006	Northvale	Resident	3/19/2019	I'm writing to you as a supporter of the Greenway concept as a walking and cycling trail. I'm a Northvale resident, avid cyclist and walker, and someone who lived in Ridgewood and used the walking trail there for 30 years. The one in Ridgewood was always busy with all kinds of traffic from seniors to young families to skateboarders and couples walking together. I used to take my Cub Scouts there on their bikes, because it was a safe place to do an outing. One of my sons lives along the Monon Trail and Greenway in Indiana. That has been a huge boon to the communities there. Builders have built condo and apartment complexes, boasting that they are on the Monon. Businesses face both the trail and the street on the other side. I believe the trail would bring an improved quality of life to the area, as well as business development, and even tourism. I am in favor of the option for separate walking and biking traffic, as a way of making both sets of enthusiasts safer. The rail option does not leave adequate room for those. If public transportation is important, run electric cars or buses on the cycling part of the trail at rush hours - the capacity could expand and contract with need.

Email Comments Received After the Public Information Center (Page 8 of 9)

Email #	Municipality	Title	Email Date	Message
319190007	Northvale	Resident	3/19/2019	I would like to provide my input concerning the proposed Northern Valley Greenway as a resident of Northvale, NJ. I think if one looks at some of the local examples of similar projects you can clearly draw the conclusion that greenways are typically a net positive for the communities they travel through. A greenway does not solely have to be a bike or jogging path. It can be a combination of that as well as areas that integrate art or where people can gather. New York City's Highline (https://www.thehighline.org/) is an example of a greenway project that has only added to the economic activity of the surrounding area. Below are some articles and case studies that came to similar conclusions. Article on the positive impacts of a newly built Greenway in North Carolina https://downtowngreenway.org/planning/economic-development/ Case Studies concerning greenways (EPA Website)
319190008	Northvale	Resident	3/19/2019	Just wanted you to be aware as a Northvale NJ resident there is an enormous amount of support in our town and the northern valley for this project. Every resident I speak with is all for it. Being from the northern end I can tell you as well that folks in the area and Rockland are excited for the connector to the Clarke trail and the Mario Cuomo Bridge trail. If you have ever been to this area on weekends the streets are flooded with pelotons on competitive cyclists doing various loops. Kids riding their bikes and families walking are basically overrun by these cyclists. The Greenaway would be a huge benefit to safety in our community as well which I think is an element overlooked. New Jersey needs more of these green initiatives ! Thank you in advance for your time and support.
319190009	Tenafly	Resident	3/19/2019	Our family owns a co-op apartment in the MARLBOROUGH in TENAFLY which is directly ADJACENT to the railroad tracks in Tenafly and whose windows overlook the tracks. I fully SUPPORT the NV Greenway Option A and believe that it will improve the quality of life for thousands of NJ residents. Very exciting!! Thank you for your hard work on this wonderful project!

Email Comments Received After the Public Information Center (Page 9 of 9)

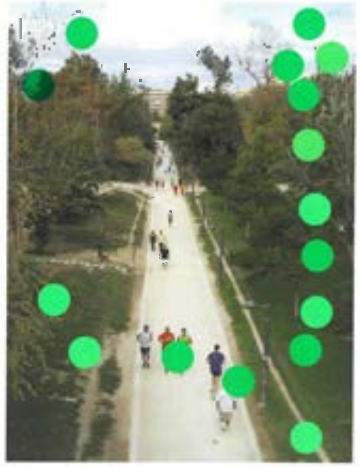
Email #	Municipality	Title	Email Date	Message
319190010	Tenafly	Resident	3/19/2019	I am writing to you to express my support for the Northern Valley Greenway. I have been a resident of Tenafly, NJ, since 2008. We are a family of six (children between the ages of 10 and 20) who likes to ride our bikes, go for walks, and enjoy nature. It is very hard to find safe places to ride our bikes as a family, especially with the younger children. My son and my husband have both been hit by cars while riding their bikes on local roads. It would be a wonderful opportunity to encourage outdoor activities for families, be it on bikes or on foot, if we had a dedicated area like the proposed Northern Valley Greenway. The current state of the abandoned rail line is just sad and does not add to the towns through which it runs. I hope that you will support the rails to trails initiative. Our quality of life would be so much improved.
319190011	Unknown	Resident	3/19/2019	Of the concepts that were presented at the NV Greenway Open House on March 5, I support the design illustrated in Concept A.

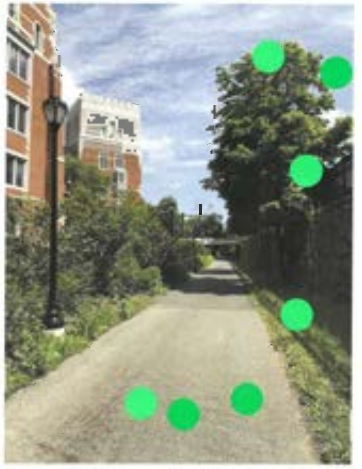
Visioning Station

The objective of the Visioning Station was to collect stakeholder and public input related to design and material considerations for the potential Northern Valley Greenway. The exhibit consisted of a diverse collection of photo examples of different greenway design treatments and public spaces related to mobility facilities, materials, linear park facilities, crossing treatments, drainage/green infrastructure, parklets, bicycle parking, trailheads, etc. The photos were printed on individual sheets and spread across a table. Attendees were directed to mark the photos with red or green dots, or sticky notes, to indicate a level of preference or local insight related to the facility depicted. Green dots indicate "love it" and red dots indicate "hate it."

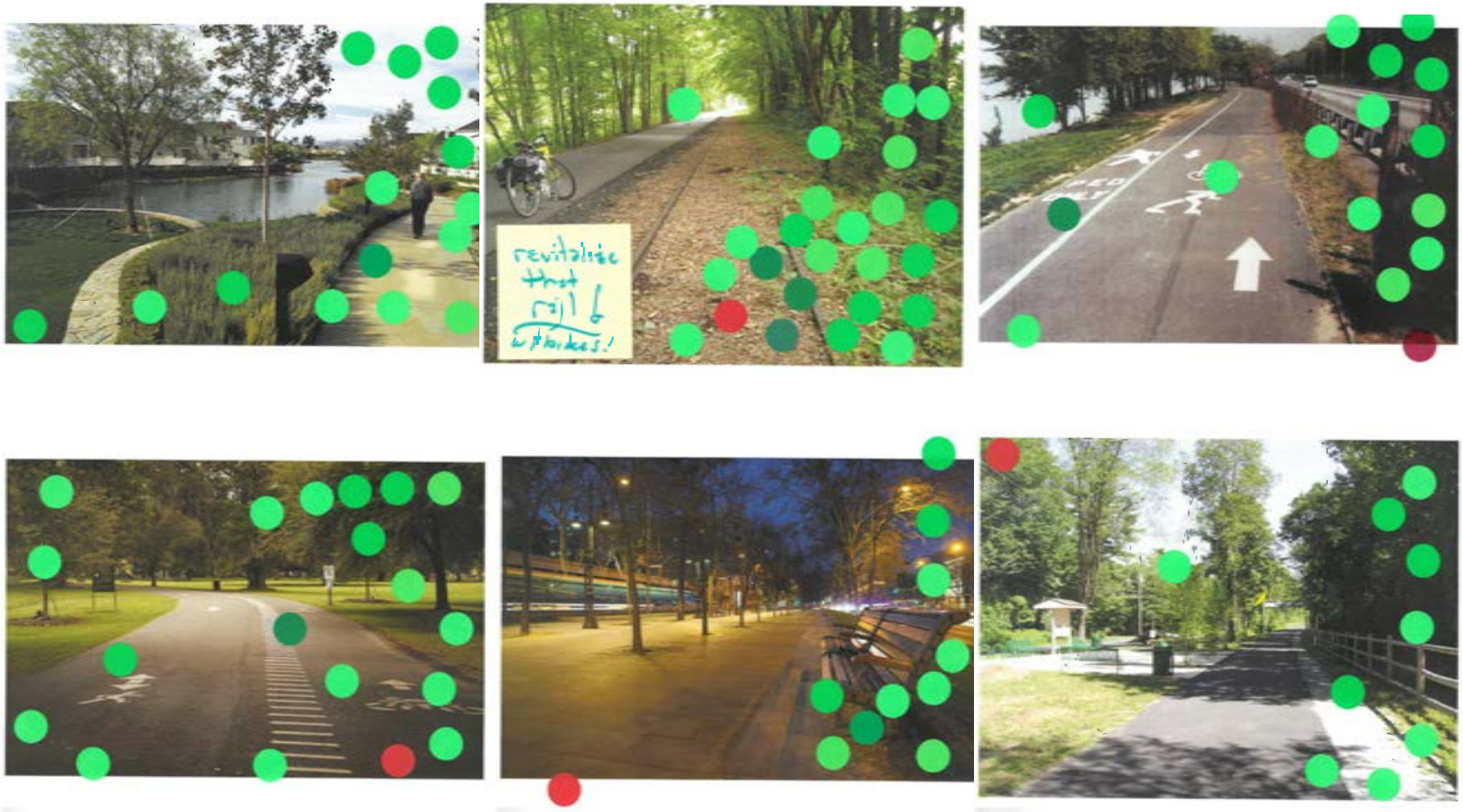
Input collected through this exhibit is provided on the pages that follow and can be incorporated into future efforts to plan and design the greenway.

Visioning Input (Greenway Facilities, page 1 of 3)

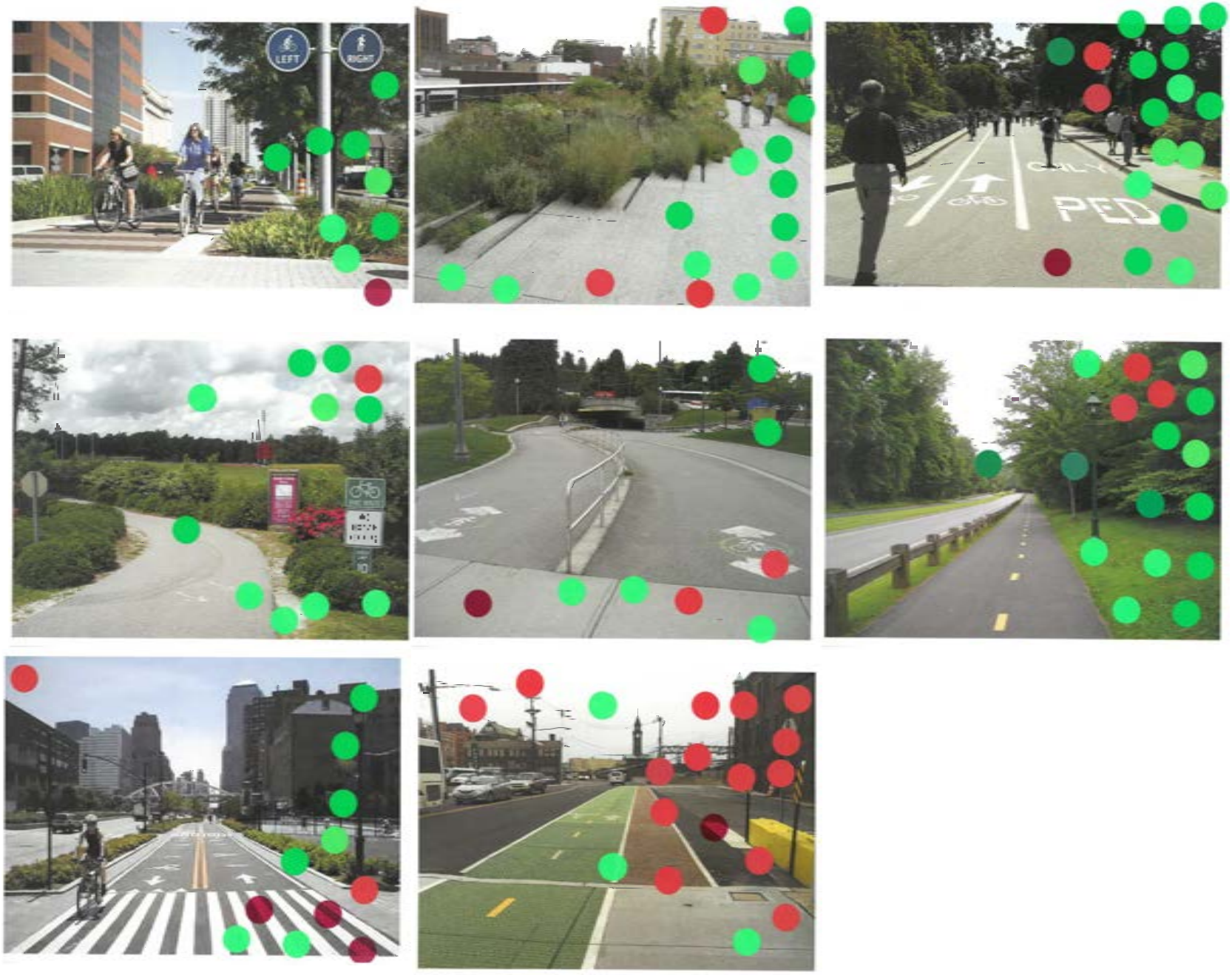




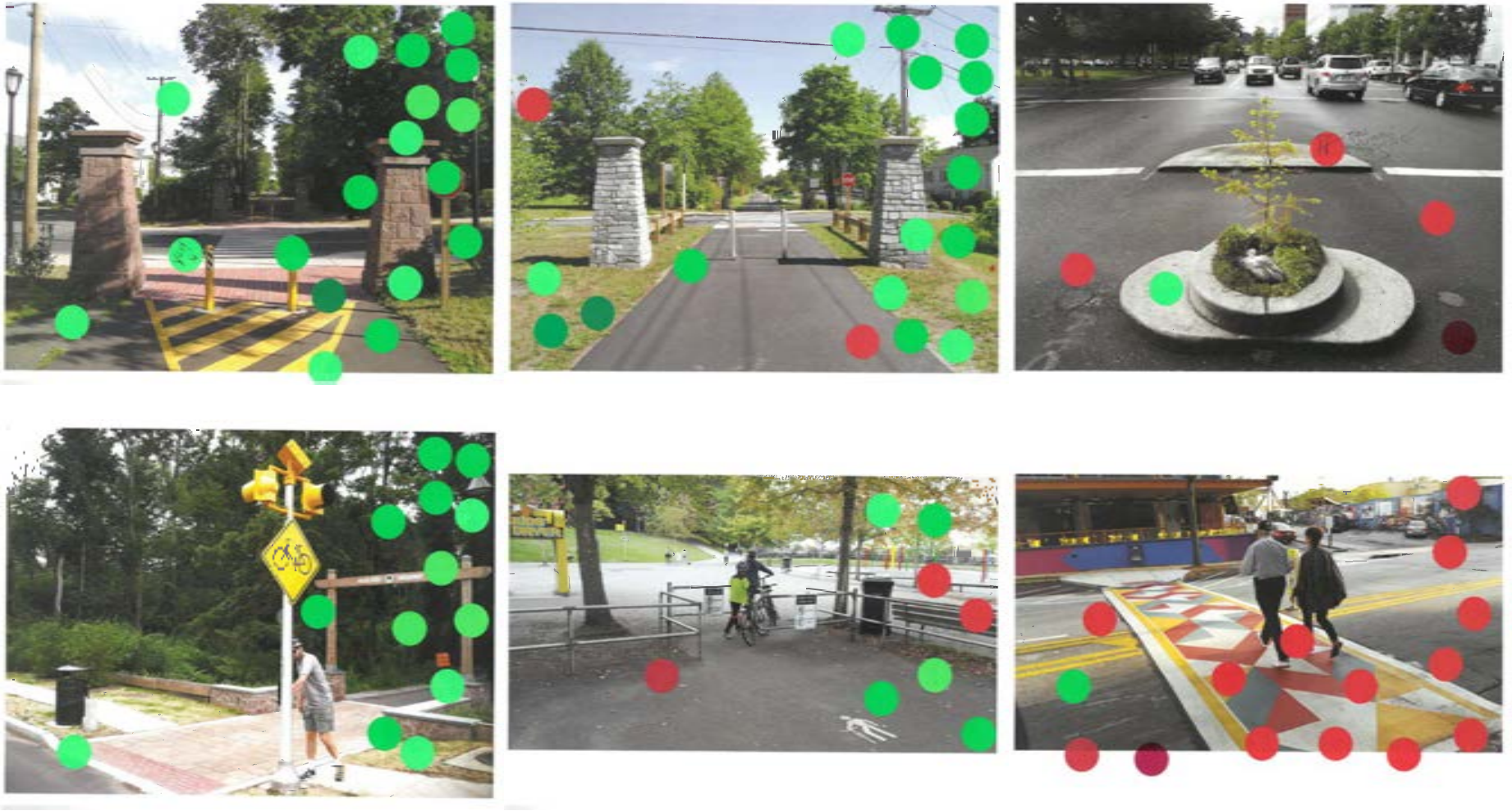
Visioning Input (Greenway Facilities, page 2 of 3)



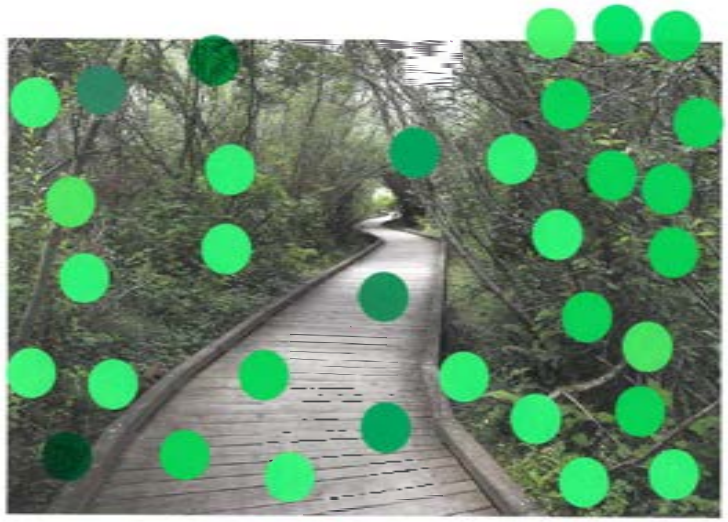
Visioning Input (Greenway Facilities, page 3 of 3)

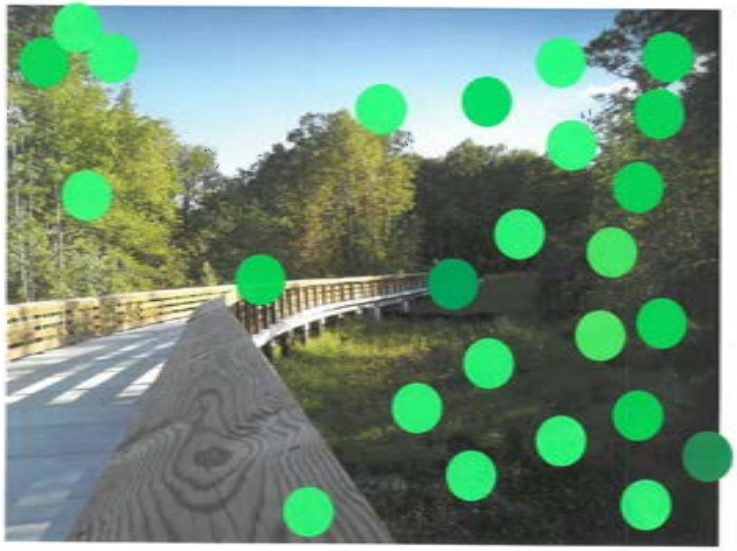


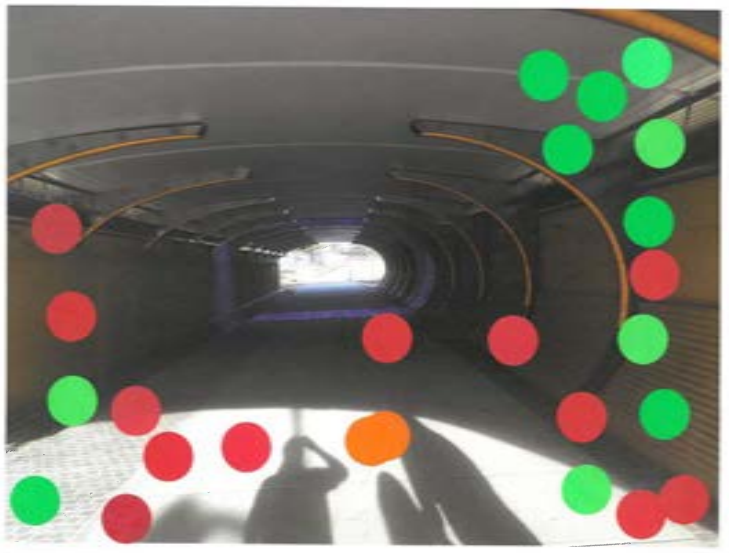
Visioning Input (Crossings, page 1 of 1)



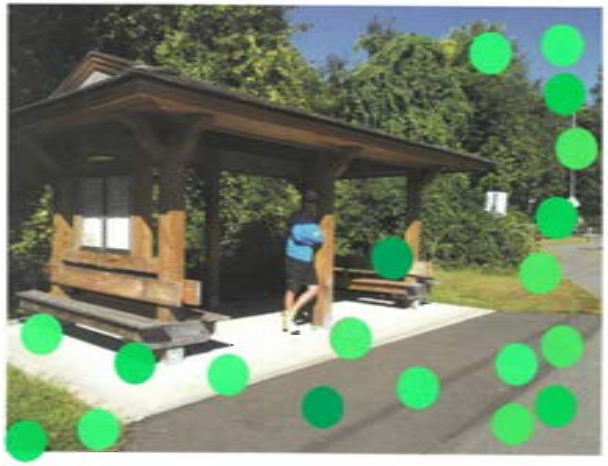
Visioning Input (Structures, page 1 of 1)







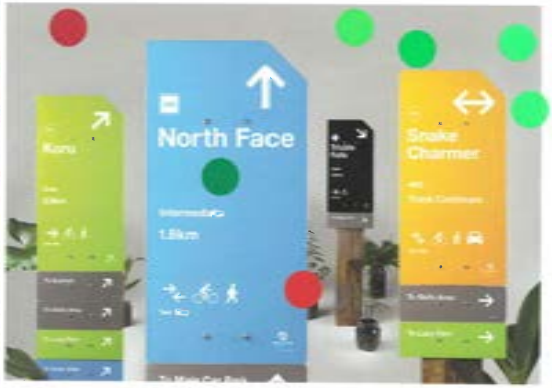
Visioning Input (Furnishings)

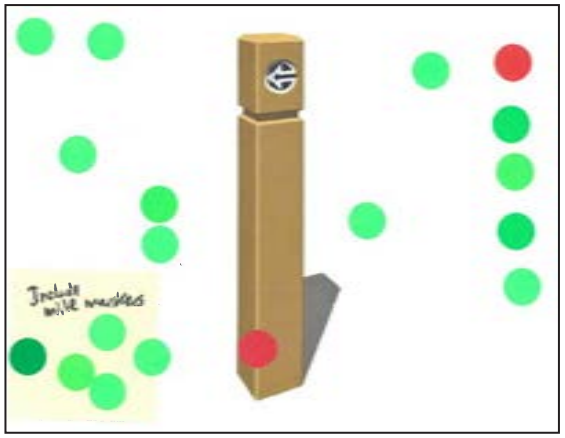


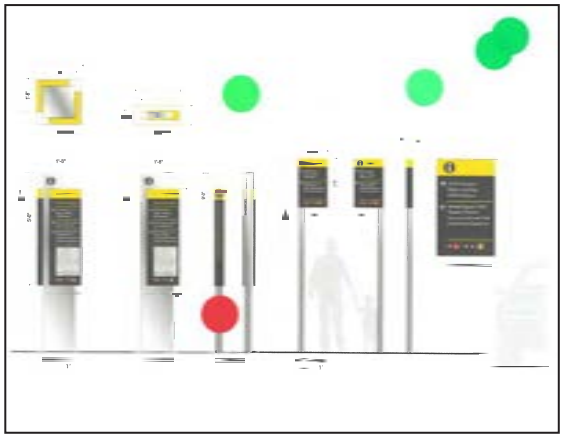
Visioning Input (Bicycle Parking)

Visioning Input (Drinking Fountains)

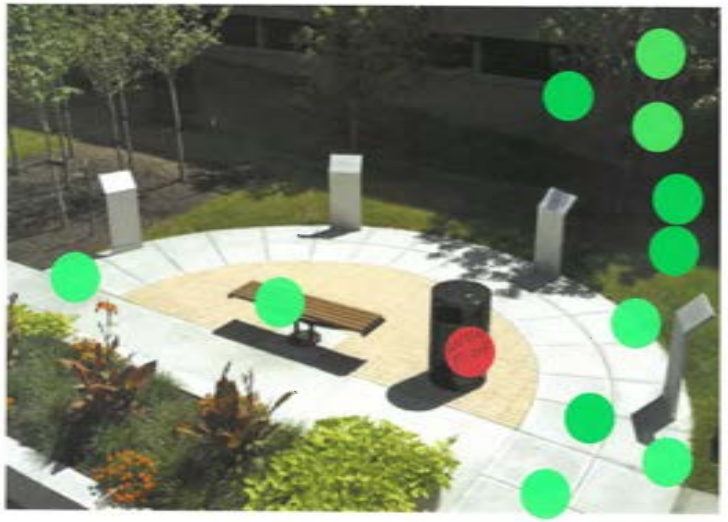
Visioning Input (Signage)

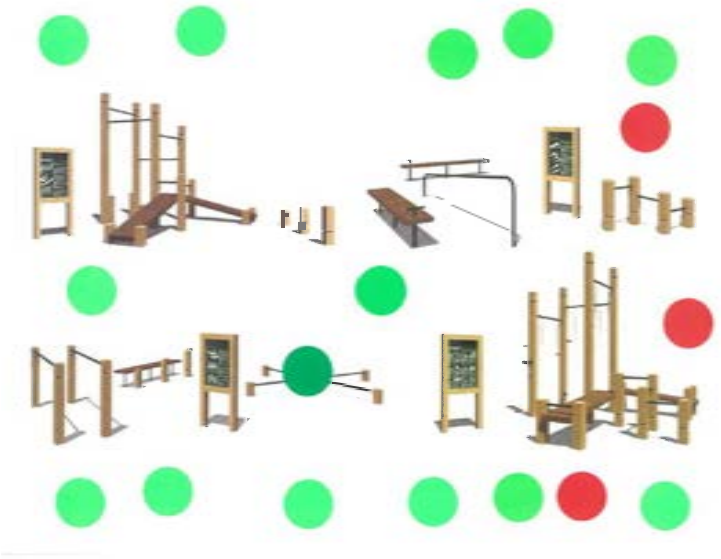






Visioning Input (Miscellaneous, page 1 of 2)





Visioning Input (Miscellaneous, page 2 of 2)