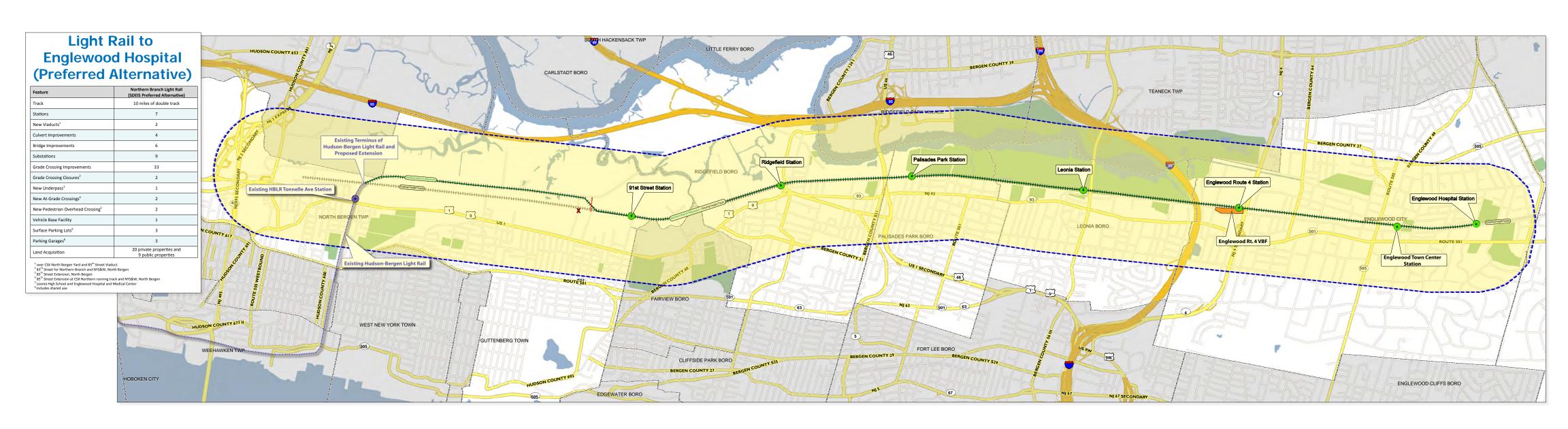
Northern Branch Corridor





NEPA and FTA Processes



The Northern Branch Project must satisfy both the environmental review process under NEPA and the FTA Project Development Process. The two processes run concurrently. The following timelines indicate the Northern Branch's stage in the two processes as well as what happens next.

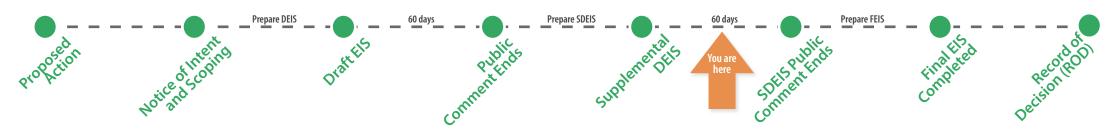
FEDERAL TRANSIT ADMINISTRATION (FTA)

The Fixing America's Surface Transportation Act (FAST), enacted on December 4, 2015, outlines a multi-year, multi-step process that proposed transit construction projects must go through to be eligible for funding from the FTA. Projects requiring an EIS must engage in a process that enhances the opportunity for public and agency coordination.



NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

NEPA requires federal agencies to consider the potential environmental consequences of their proposals. The law is applicable only to federal actions, including projects that are only partially funded by federal dollars. The following is the NEPA process for the Northern Branch EIS.



SDEIS Review & Comment



SDEIS Available for Review at:

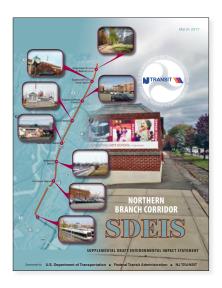
PROJECT AREA LIBRARIES

North Bergen, Fairview, Ridgefield, Palisades Park, Leonia, Englewood, Tenafly, Cresskill, Demarest, Closter, Norwood

MUNICIPAL CLERKS' OFFICES

North Bergen, Fairview, Ridgefield, Palisades Park, Leonia, Englewood, Tenafly, Cresskill, Demarest, Closter, Norwood, Northvale

http://northernbranchcorridor.com



To Provide Comments on the SDEIS:

WRITTEN COMMENTS MAY BE EITHER:

- Submitted Today in the Comment Box Located at the Front of the Room
- Sent to NJ TRANSIT by May 23, 2017 at:

Linda A. Mosch, P.E. *Project Director*

NJ TRANSIT One Penn Plaza East Newark, NJ 07105

info@northernbranchcorridor.com

VERBAL COMMENTS CAN BE GIVEN TO THE STENOGRAPHER EITHER:

- Privately at Any Time During the Hearing
- Publicly After the Presentation

Transit Operations and Projected Ridership



Light Rail to Englewood Hospital and Medical Center

(Revised Preferred Alternative)

- Hours of Light Rail Operation: 5:00 a.m. to 1:00 a.m.
- Hours of Freight Rail Operation: 1:30 a.m. to 4:30 a.m.

Frequency:

PEAK PERIOD

- Service between Englewood Hospital and Medical Center and Hoboken: Every 10 Minutes
- Service between Englewood Hospital and Medical Center and Jersey City: Every 20 Minutes



OFF-PEAK PERIOD

Service between Englewood Hospital and Medical Center and both Hoboken & Jersey City: Every 30 Minutes

Travel Time:

From	To Port Imperial, Weehawken	To Hoboken
Englewood Hospital and Medical Center Station	21 minutes	33 minutes
Englewood Town Center Station	20 minutes	32 minutes
Englewood Route 4 Station	17 minutes	29 minutes
Leonia Station	15 minutes	27 minutes
Palisades Park Station	13 minutes	25 minutes
Ridgefield Station	11 minutes	23 minutes
91st Street Station	8 minutes	20 minutes
Tonnelle Avenue Station	4 minutes	16 minutes

Ridership:

Station	Daily Riders
Englewood Hospital and Medical Center Station	1,640
Englewood Town Center Station	3,190
Englewood Route 4 Station	2,160
Leonia Station	1,670
Palisades Park Station	660
Ridgefield Station	1,650
91st Street Station	1,400
TOTAL Riders	12,370
TOTAL Trips	24,740

Infrastructure Improvements



Typical Light Rail Vehicle Infrastructure









Typical Grade Crossing





Typical Station



Side Platform Stations

One passenger platform serving northbound service and one passenger platform serving southbound service



Center Island Stations

One passenger platform in the middle, serving both directions

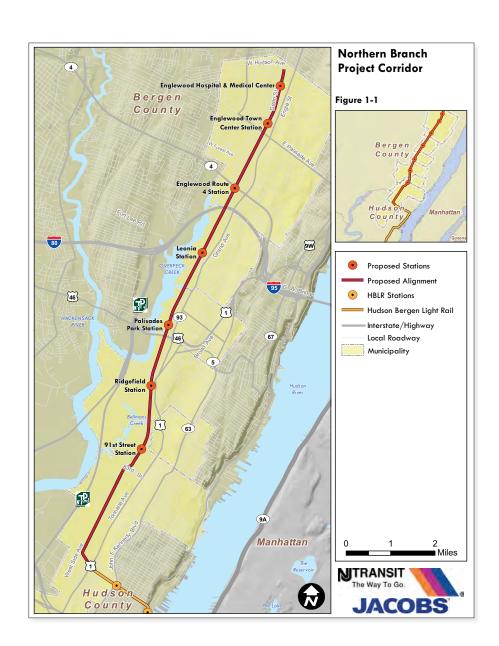
Why Has a SDEIS Been Prepared?



Supplemental DEIS was Prepared to Document Project Changes in Response to DEIS Comments & Evaluate Environmental Impacts as a Result of Those Changes

WHAT HAS CHANGED IN THE SDEIS?

- New Preferred Alternative Terminating at Englewood Hospital
- New West Side Avenue Alignment/Light Rail Removed from CSX North Bergen Rail Yard
- Leonia Station Relocation & Addition of Parking Deck
- Englewood Route 4 Station Co-Located on VBF Site with Parking Deck on 2nd, 3rd & 4th Stories above VBF
- Englewood Town Center Station Platform Relocated Between Palisade & Demarest Avenue with Surface Parking Area Between Rail ROW & North Dean Street Reconfigured and 2 Tracks through Town Center Area
- Englewood Hospital & Medical Center Station Addition of Pedestrian Overpass Connecting Station with Parking Garage over Dean Street and Use of Existing Parking Garage at Hospital
- Light Service Hours Extended to be 5:00 a.m. to 1:00 a.m. (assumed to be 5:30 a.m. to 10:30 p.m. in the DEIS)
- Ridership Model Revised to Reflect New Service Hours and Updated US Census Data



SDEIS Findings



- EIS is NEPA Requirement for Projects that May Result in a Significant Effect on Human or Natural Environment
- EIS is a Tool for Decision-making
- Environmental Topics Studied in the Northern Branch SDEIS
 & Their Impact Findings Are:

Minimal to No Impact:

- Land Use and Zoning
- Consistency with Local Plans
- Transit
- Air Quality
- Water Quality
- Navigable Waterways and Coastal Zones
- Endangered Species
- Energy
- Electric and Magnetic Fields
- Safety and Security
- Historic Properties and Resources
- Archaeology
- Environmental Justice
- Greenhouse Gas Emissions and Climate Change
- Indirect Impacts and Cumulative Effects

Impacts That Can Be Mitigated to Minimize/Eliminate Effects:

- Community Facilities
- Parking and Traffic
- Freight Rail
- Vibration
- Floodplains
- Hazardous Materials

Impacts That Can Be Mitigated But Will Have Effects:

- Wetlands
- Noise
- Construction Impacts
- Land Acquisition and Displacement
- Parklands/Section 4(f)











Environmental Effects





Noise

- Noise assessment using FTA's guidance manual Transit Noise and Vibration Impact Assessment
 - Noise modeling assumed worst-case-scenario of 2 freight train pass-bys per night; however current freight service is much less frequent
- Train horn noise impacts can be eliminated through use of Quiet Zones
- Application by municipality or county
- Quiet Zones safety equipment included in Project construction cost
- Wayside noise impacts from movement of trains
 - Assuming a worst-case scenario moderate noise impacts to 211 residences and severe impacts to 1 residence
 - NJ TRANSIT would confer with property owner to explore mitigation strategies for 1 severe impact such building insulation/acoustic windows



Wetlands

- Wetlands generally function as drainage swales of ordinary resource value collecting runoff from impervious surfaces
- Project would disturb 3.92 acres of wetlands
- Mitigation for permanent impacts would require agreement between NJDEP, USACE, and NJ TRANSIT
- The function of the wetlands within the watershed to be mitigated through purchase of mitigation credits through a wetlands credit bank



Construction

- Impacts during construction will be temporary
- Proper mitigation measures to alleviate impacts to be determined during final design for:
- Interference with normal traffic operating conditions for vehicles, freight and emergency responders
- Short-term unavoidable air quality and noise impacts
- Use of energy resources
- Impacts to water quality, wetlands and floodplains
- Community safety and awareness

West Side Avenue Alignment North Bergen



CHANGES FROM DEIS TO SDEIS

- Light Rail Removed from CSX North Bergen Rail Yard
- New Alignment
- Viaduct over Rail Yard
- Along West Side of West Side Ave.

- Viaduct over NYS&W & CSX Tracks
- Onto Northern Branch Running Track
- North Bergen VBF Eliminated
- No change to proposed 83rd Street closure and the 85th Street Extension to West Side Ave.

SDEIS HIGHLIGHTS

Land Acquisitions:

- Viaduct over CSX North Bergen Yard: Air rights and potential easements on 2 private properties
- West Side Avenue Substation: Partial 1 private property
- 85th Street Extension and 85th Street Viaduct: Partial takes of 1 private property and1 public property

Section 4(f) Parklands:

Partial Acquisition of Vacant Land South of North Bergen Municipal Pool

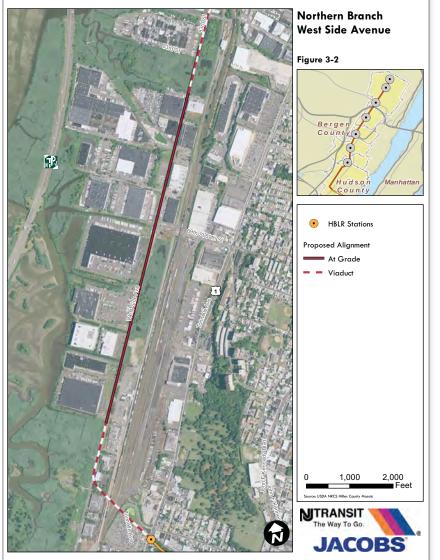
Noise:

No Impacts

Traffic: With Proposed Improvements, Intersections Would Operate Similar or Better

- West Side Avenue: Modified lane configuration to accommodate rail within roadway ROW
- 69th Street/West Side Avenue Intersection: Modified Signal
- 71st Street/West Side Avenue Intersection: Install New Signal
- 83rd Street/Tonnelle Avenue Intersection: Signal Optimization
- 85th Street/Tonnelle Avenue Intersection: Signal Optimization and roadway widening to include northbound left turn lane, southbound right turn lane, and 2 through lanes in each direction





91st Street Station



CHANGES FROM DEIS TO SDEIS

- No Change to Station Location
- Service Hours and Ridership Updated

SDEIS HIGHLIGHTS

Land Acquisitions:

None; shared use agreement for 1 property

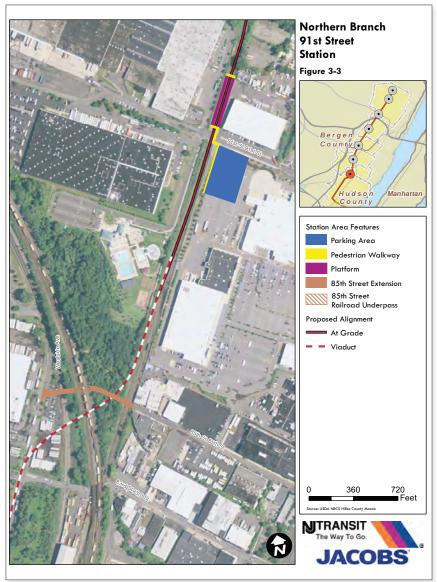
Noise:

No Impacts

Traffic: With Proposed Improvements, Intersections Would Operate Similar or Better

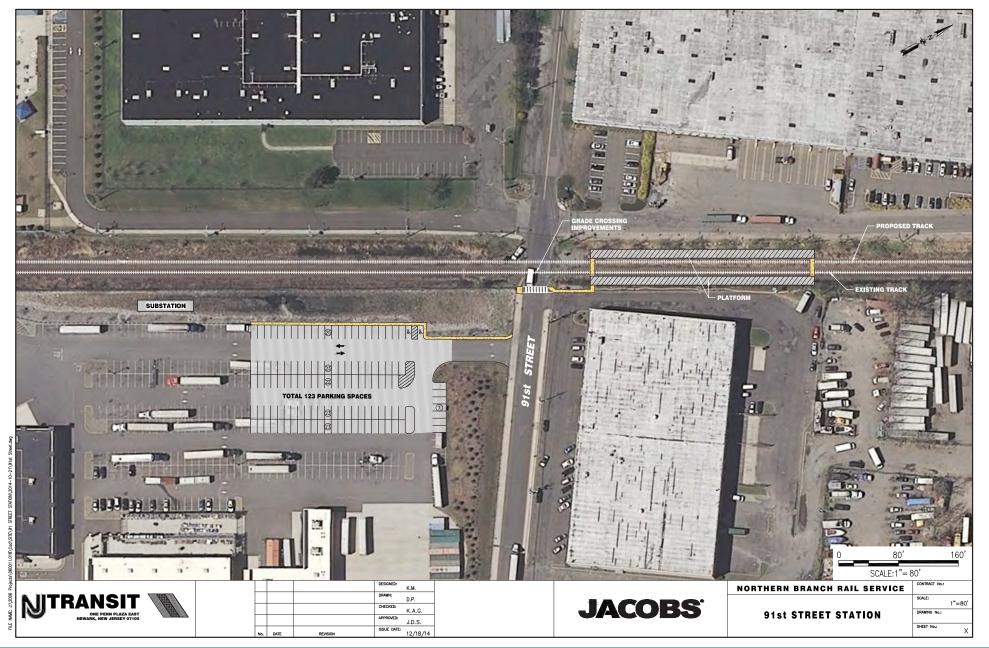
 91st Street/Tonnelle Avenue Intersection: Traffic Signal Optimization and Roadway Widening to Include Westbound Left Turn Lane and Restriping of Eastbound Approach to Include Left Turn Lane and Shared Through/Right Turn Lane





91st Street Station Site Plan





Ridgefield Station



CHANGES FROM DEIS TO SDEIS

- No Change to Station Location
- Service Hours and Ridership Updated



SDEIS HIGHLIGHTS

Land Acquisitions:

- 1 private property
- 3 public properties

Noise:

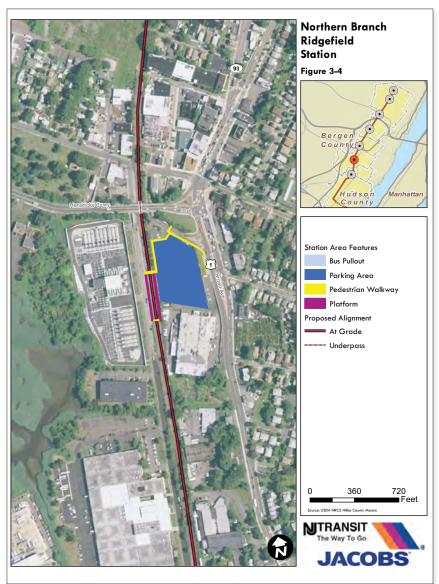
No Impacts

Traffic: With Proposed Improvements, Intersections Would Operate Similar or Better

- Edgewater Avenue/Route 1&9 Intersection: Traffic Signal Optimization and Roadway Widening to Include Eastbound & Westbound Left Turn Lanes
- Hendricks Causeway/Route 1&9 Intersection: Traffic Signal Optimization

Parking:

Traffic Mitigation Requires Removal of 5 On-Street Parking Spaces



Ridgefield Station Site Plan





Palisades Park Station



CHANGES FROM DEIS TO SDEIS

- No Change to Station Location
- Service Hours and Ridership Updated



SDEIS HIGHLIGHTS

Land Acquisitions:

8 private properties

Noise:

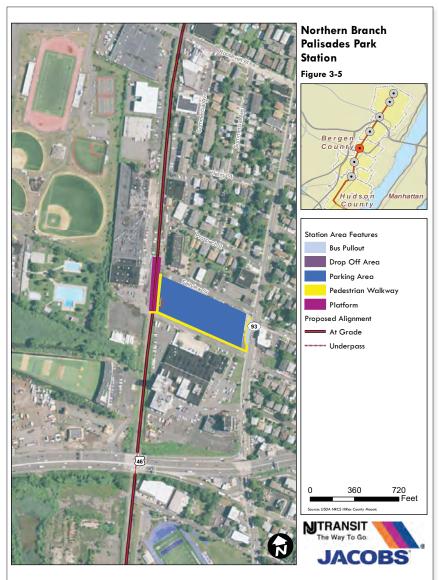
With Quiet Zones, No Impacts

Traffic: With Proposed Improvements, Intersections Would Operate Similar or Better

- Fairview Avenue/Grand Avenue Intersection: Install Traffic Signal & Roadway Widening of Northbound and Eastbound Approaches to Include Left Turn Lane and Shared Through/ Right Turn Lane
- West Ruby Avenue/Grand Avenue Intersection: Install Traffic Signal & Roadway Widening of Northbound, Eastbound and Westbound Approaches to Include Left Turn Lane and Shared Through/ Right Turn Lane

Parking:

Traffic Mitigation Requires Removal of 17 On-Street Parking Spaces



Palisades Park Station Site Plan





Leonia Station



CHANGES FROM DEIS TO SDEIS

- Relocation of Station & Parking Deck
- South of Fort Lee Road
- Within Overpeck County Park
- Site of an Abandoned Basketball Court & Comfort Building
- Addition of Pedestrian Overpass Connecting High School to Overpeck Park
- Service Hours and Ridership Updated



SDEIS HIGHLIGHTS

Land Acquisitions:

Easements for 2 Public Properties

Section 4(f) Parklands:

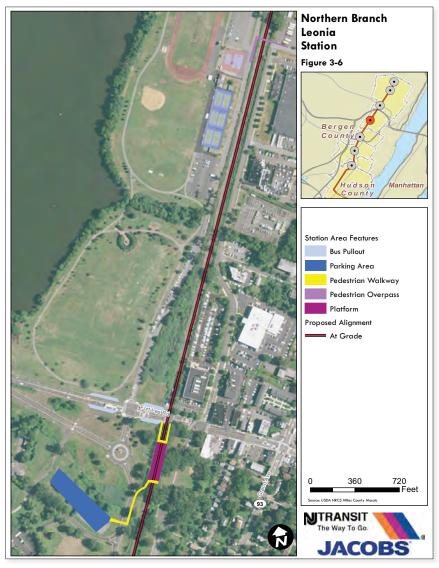
Easement in Overpeck County Park for Parking Deck and Bus Pullouts

Noise:

Quiet Zones Eliminate Horn Noise. Moderate Impacts from Wayside Noise

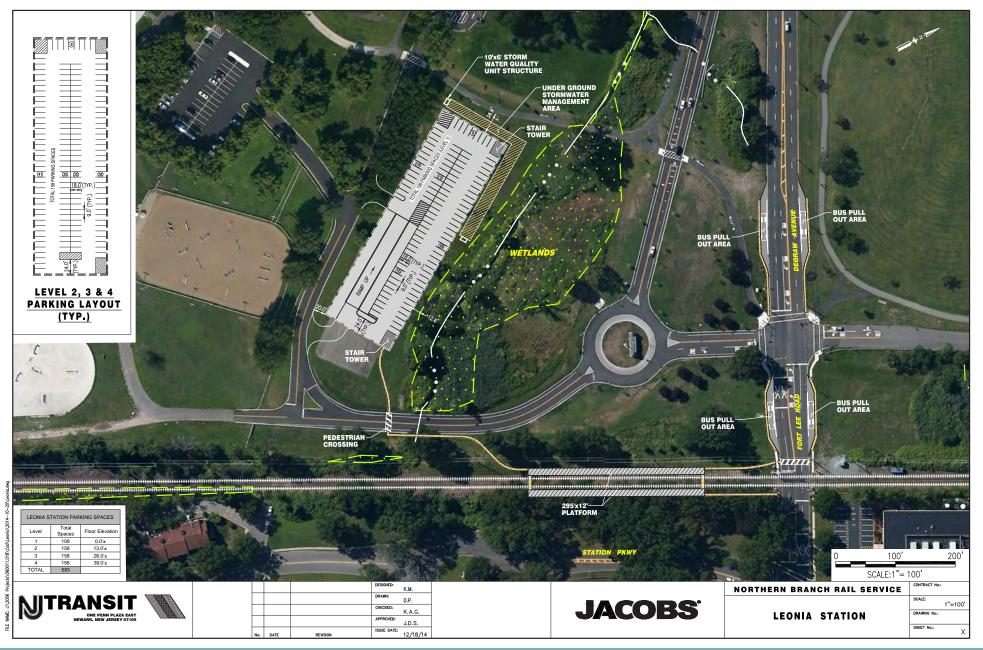
Traffic: With Proposed Improvements, Intersections Would Operate Similar or Better

- Fort Lee Road with Overpeck Park Entrance: Traffic Signal Optimization
- Fort Lee Road with Willow Tree Road/Station Parkway: Traffic Signal Optimization
- Fort Lee Road with Grand Avenue: Traffic Signal Optimization & Roadway Widening of Westbound Approach to Include Left Turn Lane (Approximately 2 feet of Sidewalk Required)



Leonia Station Site Plan





Englewood Route 4 Station & Vehicle Base Facility



CHANGES FROM DEIS TO SDEIS

- Co-Locate Station Parking Deck on the VBF Site
- Parking Deck 2nd, 3rd & 4th Stories Above VBF
- Service Hours and Ridership Updated



SDEIS HIGHLIGHTS

Land Acquisitions:

- 6 Private Properties
- 1 Public Property

Noise:

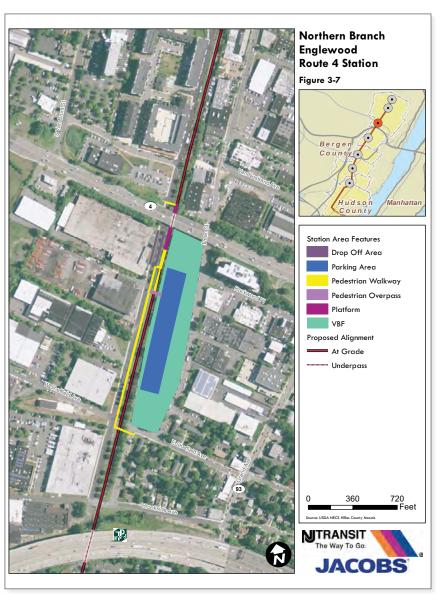
With Quiet Zones, No Impacts

Traffic: With Proposed Improvements, Intersections Would Operate Similar or Better

- Sheffield Avenue with Grand Avenue Intersection: Roadway Widening of Southbound Approach to Include Left Turn Lane
- Grand Avenue with Route 4 EB entrance ramp Intersection: Traffic Signal Optimization
- Van Nostrand Avenue/ Grand Avenue with Route 4 WB exit ramp Intersection: Traffic Signal Optimization & Roadway Widening of Westbound Approach to Include Left Turn Lane

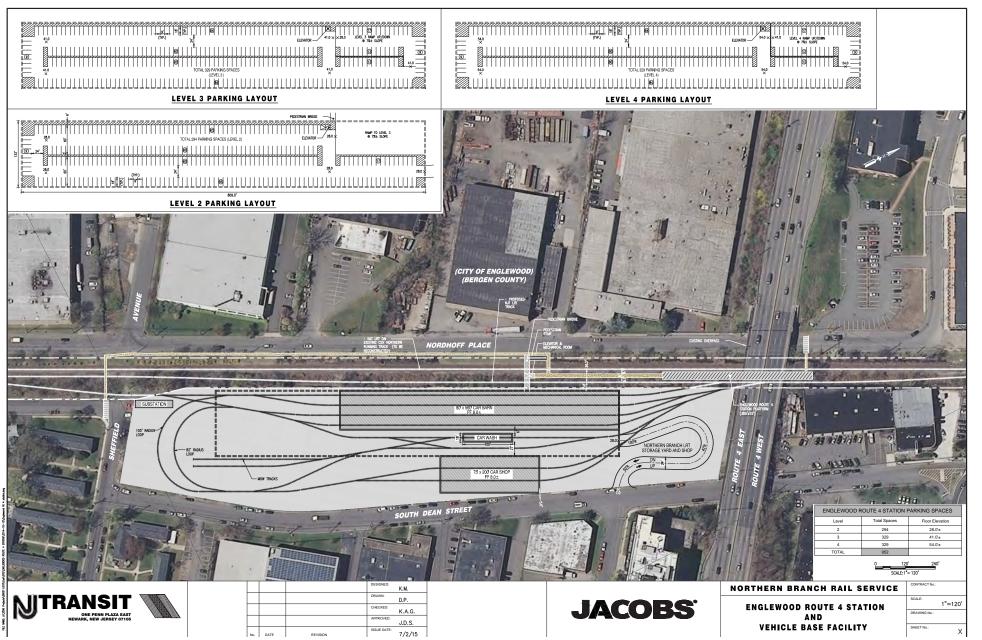
Parking:

Traffic Mitigation Requires Removal of 6 On-Street Parking Spaces



Englewood Route 4 Station & VBF Site Plan





Englewood Town Center Station



CHANGES FROM DEIS TO SDEIS

- 2 Tracks through Town Center Area
- Reconfigured Surface Parking Area between Rail ROW & North Dean Street
- Station Platform Relocated Between Palisade & Demarest Avenue
- Service Hours and Ridership Updated



SDEIS HIGHLIGHTS

Land Acquisitions:

- 3 Private Properties
- 4 Public Properties

Section 4(f) Parklands:

 2nd Track and Station Platforms Require 0.15 Acres of Depot Square Park East Parking Lot of & 0.08 Acres of Depot Square Park West Sidewalk

Noise:

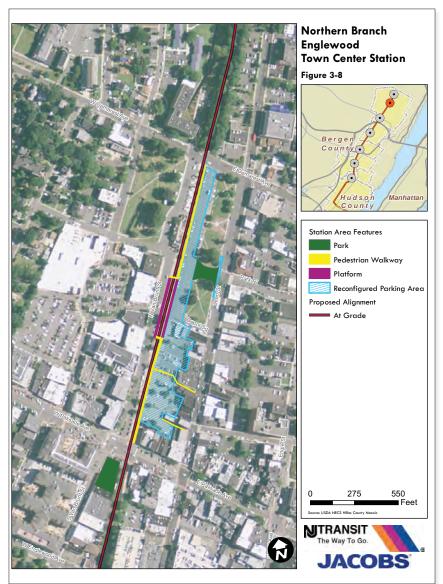
With Quiet Zones, No Impacts

Vibration:

 Impacts to Bergen PAC Performing Arts School Can Be Eliminated Through Mitigation Such As High Resilience Fasteners & Resiliently Supported Ties

Traffic: With Proposed Improvements, Intersections Would Operate Similar or Better

Traffic Signal Optimization at Intersections: Palisade Avenue with Nathaniel Place/ Humphrey Street,
 Palisade Avenue with Van Brunt Street & Englewood Avenue with Van Brunt Street



Englewood Town Center Station Site Plan





Englewood Hospital & Medical Center Station



CHANGES FROM DEIS TO SDEIS

- Use of Existing Parking Garage at Hospital
- Addition of Pedestrian Overpass Connecting Station with Parking Garage over Dean Street
- Service Hours and Ridership Updated

SDEIS HIGHLIGHTS

Land Acquisitions:

 Shared Use Agreement for Parking Deck at Englewood Hospital and Medical Center

Noise:

 Quiet Zones Eliminate Horn Noise. Moderate Impacts from Wayside Noise

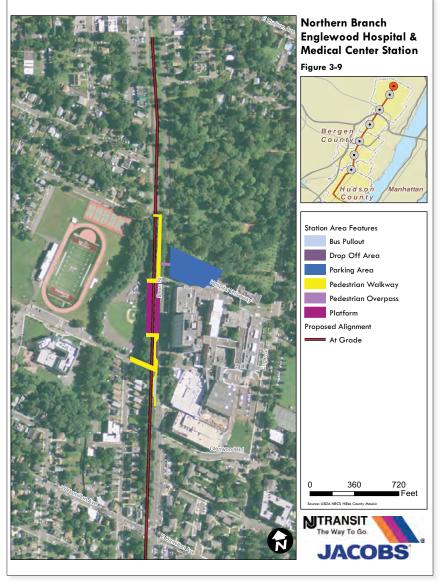
Vibration:

 Impacts to 1 Residence Can Be Eliminated Through Mitigation Such As High Resilience Fasteners & Resiliently Supported Ties

Traffic: With Proposed Improvements, Intersections Would Operate Similar or Better

 Traffic Signal Optimization/Coordination at Intersections: Hudson Avenue with Curry Avenue, Ivy Lane with Curry Avenue, Hudson Avenue with North Dean Street & Ivy Lane with North Dean Street





Englewood Hospital Station Site Plan





Tenafly to Northvale



CHANGES FROM DEIS TO SDEIS

- Light Rail in Tenafly Removed
- Service Hours and Ridership Updated

SDEIS HIGHLIGHTS

Freight:

Shift in Freight Service to Overnight Hours May Affect Freight Customers

Noise:

 Quiet Zones Eliminate Horn Noise. Assuming Worst-case Scenario, Wayside Noise Impacts to 192 Residences

1 Severe Impact:

 NJ TRANSIT Would Confer with Property Owner to Explore Mitigation Strategies Such as Building Insulation/Acoustic Windows

191 Moderate Impacts:

Tenafly: 26

Cresskill: 78

• Demarest: 3

Closter: 14

Norwood: 31

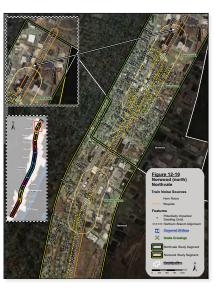
Northvale: 40











Section 4(f)/Parklands



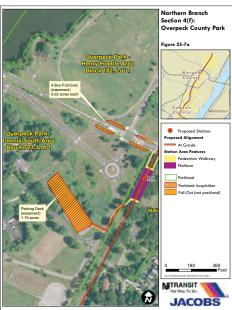
SECTION 4(F) OF THE UNITED STATES DEPARTMENT OF TRANSPORTATION ACT OF 1966

- Federally-funded projects may not use land from a publicly-owned park, recreation area, wildlife or waterfowl refuge, or from a significant historic site unless a determination is made that there is no alternative and the project will minimize harm from its use
- Requires coordination with the public and local, county, state, and federal agencies
- Section 4(f) evaluation is a chapter of the Northern Branch Corridor SDEIS
 - Public review and comment as part of NEPA process
 - Coordination will continue through the Final Environmental Impact Statement (FEIS)

NORTHERN BRANCH SECTION 4(F) FINDINGS

- Requires partial acquisition or easements of 3 parkland resources
 - North Bergen Municipal Pool, North Bergen (vacant parkland south of pool)
 - Overpeck County Park, Leonia
 - Depot Square Park (East and west), Englewood
- No visual or noise impacts to parks
- FTA proposing a *de minimis* use determination for all three resources







Cultural/Section 106 Resources



SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT OF 1966

- Federal agencies must take into account the effect of actions on historic properties
- Actions require coordination with the State Historic Preservation Office (NJ SHPO)

SDEIS FINDINGS

- There are 10 historic resources within the APEs depicted below. There will be no adverse effects on these resources
- No impacts are expected to known archaeological resources
- Mitigation measures for construction activities are aimed at buffering historic resources from noise, vibration, and dust
- Mitigation would be reviewed by the SHPO

NORTHERN BRANCH AND THE 106 PROCESS

- Interested and Consulting Parties have been identified
- Area of Potential Effect (APE) identified
- Historic and historic-eligible properties (historic and archaeological) within the APE have been identified
- Opinion of effects to be provided to NJ SHPO for review
- Draft Programmatic Agreement prepared
- Findings documented in SDEIS

