

## **22. Safety and Security**

### **22.1. Chapter Overview**

#### **22.1.1. Introduction**

The following section identifies potentially significant safety issues and security concerns that could occur due to transit improvements associated with the proposed project. Safety and security measures during construction as well as those resulting from revenue operation service are described below. Measures to reduce or eliminate these impacts are described in the methodology section within this chapter.

#### **22.1.2. Summary of Findings**

The reintroduction of passenger rail service will intensify railroad activity along the right-of-way. Safety and security issues for the Build Alternatives are as follows:

- Increased rail traffic will necessitate safety improvements at grade crossings along the alignment under both Build Alternatives. Grade crossing protection ranges from crossing and four-quadrant gates to flashers and pedestrian gates. NJ TRANSIT will provide measures to educate the public within corridor municipalities.
- South of, and including, Englewood Route 4 Station, development patterns are concentrated east of the right-of-way with emergency service responders similarly located. As a result, increased rail traffic and frequent grade crossings do not present an impact to emergency response times in North Bergen, Fairview Ridgely, Palisades Park, Leonia, or Englewood south of Route 4.
- The rail alignment north of Englewood Route 4 Station, which includes the remainder of Englewood and all of Tenafly, bisects the municipalities, with emergency responders located west of the right-of-way. Increased rail activity will affect the accessibility of grade crossings, which may result in increased response time for emergency responders accessing areas east of the right-of-way.
- NJ TRANSIT will coordinate with all local jurisdictions along the corridor and Hudson and Bergen Counties to develop physical and operational measures to mitigate the potential for emergency service access issues.
- All station areas will be patrolled by NJ TRANSIT police who will work in concert with local police jurisdictions. The stations will be equipped with lighting as well as video surveillance, monitored by NJ TRANSIT, which functions as a preventative safety measure and vandalism deterrent.
- Under both alternatives, NJ TRANSIT's Safety Education Program, administered and staffed by NJ TRANSIT safety specialists, will offer communities and stakeholders a program that promotes proper behavior in and around stations, facilities, tracks and equipment.

### **22.2. Methodology**

A corridor level review was conducted to identify potential safety and security considerations associated with the proposed project that were common across municipalities. Potential safety issues along the corridor are related to construction and operational safety and security, grade crossings and the provision of emergency services. These issues are addressed by municipality later in the chapter. The following

narrative describes the regulatory context in which safety measures will be implemented and identifies measures that will enhance safety and security during construction and operation.

The Northern Branch Corridor DEIS assumes that CSX Corporation will continue to serve its current customers by operating similar freight service in the Northern Branch Corridor as is presently operated. However, this service has been infrequent and project area residents are generally not accustomed to frequent or moderate train movements along the right-of-way that will result from the implementation of passenger service. As the proposed project would increase the number, frequency, and speed of trains using the right-of-way, roadway vehicle and pedestrian safety impacts may occur, particularly at grade-crossings. As part of the proposed project, track along the entire right-of-way within the project area would be replaced and/or upgraded to accommodate the operational and safety needs of frequent passenger rail service. Right-of-way safety will be provided by NJ TRANSIT's Rail Safety Education Program as detailed below.

### **22.2.1. Safety Education Program**

NJ TRANSIT's Safety Education Program offers communities and stakeholders a program that promotes proper behavior in and around stations, facilities, tracks and equipment. The program is administered and staffed by NJ TRANSIT safety specialists and is available at no cost to all public, private and charter schools, and to any service, religious or community organization upon request.

NJ TRANSIT works directly with local elected officials and community leaders to raise awareness about rail, bus and light rail safety. Each year regional school superintendents receive personalized mailings requesting access to local schools in order to make safety presentations to students. The program is also promoted statewide at the League of Municipalities and the New Jersey Education Association Convention.

NJ TRANSIT's Safety Education Program is composed of separate, age-specific teaching modules as detailed below:

- **Pre-Kindergarten to 3<sup>rd</sup> Grade** – Using cartoon-animated videos and handouts, students are introduced to types of equipment they may see in their community and how to keep safe around them. The presentation incorporates age-appropriate safety messages.
- **4<sup>th</sup> to 6<sup>th</sup> Grade** – Using videos based on true-life scenarios and handouts, students are taught specific safety information targeted to their cognitive advancement, such as the distance it takes to stop a train, proper behavior when waiting on a platform and the meaning of signs and signals at grade crossings.
- **7<sup>th</sup> to 12<sup>th</sup> Grade** – As young adults, students are now exposed to the legalities of their behavior and facts about trespassing and fines. Safety continues to be an underlying message, but their responsibilities and consequences of their actions are also topics of discussion.
- **Driver Education Safety** – This program has been reviewed by the New Jersey Department of Education and is in alignment with New Jersey Core Curriculum Contents Standards. Through presentations and videos, students are taught safety protocols when driving in areas with active rail lines and crossings, and on roads shared with buses.

### **22.2.2. Safety and Security Measures**

The FTA requires each state with fixed rail guideway transit systems to develop and implement a Safety and Security Program Plan (SSPP) standard under *State Safety Oversight of Rail Fixed Guideway*

*Systems*, 49 CFR, Part 659. NJ TRANSIT would follow the provisions of its current Safety and Security Program Plan, in accordance with the aforementioned Federal guidelines, as they apply to the extension of the Hudson-Bergen Light Rail from Tonelle Avenue to the connection to the Northern Branch service. The tracks running from North Bergen to Englewood Route 4 or Tenafly would fall under the jurisdiction of the Federal Railroad Administration (FRA). Accordingly, safety procedures pursuant to FRA guidelines would apply to this segment of track.

In addition, Federal railway worker safety requirements for the tracks, during construction and later ongoing maintenance activities, must be assured. Prior to construction and operation, NJ TRANSIT and CSX will agree to a safety protocol.

#### *22.2.2.1. Mitigation for Construction Safety Issues*

Prior to the commencement of construction, all contractors would undergo rail safety training that will conform to the requirements of the respective operators including Conrail, NYS&W, CSX and Hudson-Bergen Light Rail. Municipal life safety services would be contacted prior to the initiation of any activities, and coordination between NJ TRANSIT and local police, fire, and other emergency services would continue through the duration of the construction phase. NJ TRANSIT would coordinate with contractors and personnel to ensure that safety guidelines are incorporated into their construction procedures.

The use of fencing and signage would physically buffer construction sites from public space and provide sufficient warning to the public. Fencing would also deter vandalism and trespassing thereby minimizing the vulnerability of construction sites.

#### *22.2.2.2. Prior to the Initiation of Revenue Service*

The commissioning of new railroads is a multi-disciplinary effort, which incorporates a number of tasks, including System Safety and Security Certification. The New Jersey Department of Transportation's State Safety Oversight Office (SSO) participates in commissioning and ultimately approves the System Safety Security program and emergency response and preparedness training as outlined by the Fire/Life Safety Committee. The SSO also participates in Fire/Life Safety Committee designs, emergency response meetings and field drills.

The Fire/Life Safety Committee coordinates training for local fire, police and emergency medical teams on appropriate response techniques. They also familiarize local response teams with the operations and propulsion systems of the equipment. NJ TRANSIT Police and Rail Safety personnel work with other state agencies and local responders to train for events, such as: derailments, auto strikes, fires, medical emergencies, rescues, etc. Additionally the Fire/Life Safety Committee establishes the communications protocol which identifies appropriate personnel at both the local and rail operations levels that are in command functions and can organize a response.

Prior to the start of revenue service and periodically afterwards, a field drill is held using real equipment and personnel to simulate an emergency event. The Fire/Life Safety Committee as well as the local response teams are able to observe and evaluate how well the event was handled and where improvements might be necessary. In addition, several times a year, tabletop exercises are conducted which model specific emergencies in controlled environments and allow for a more detailed examination of response protocols.

The emergency response and preparedness training program coordinated by the Fire/Life Safety Committee must be reviewed and certified by the Safety Review Committee before commissioning.

### 22.2.2.3. Safety Measures During Revenue Service

The electric light rail vehicle does not comply with the FRA structural test (49 CFR part 238.203 static end strength) and therefore cannot operate within the existing track at the same time that freight service operates. Consequently, the Build Alternatives will operate under a temporal separation scheme, requiring coordination with CSX to ensure that freight operations and light rail operations do not occur at the same time. Freight operations will be constrained to the late evening and overnight hours, between 11:00 PM and 5:00 AM, allowing passenger light rail service to operate from 5:30 AM to 10:30 PM without interference.

### 22.2.2.4. Grade Crossing Protection

The reintroduction of passenger rail service through the municipality will result in increased rail traffic with more frequent grade crossings than currently exist. As such, appropriate safety elements to help ensure pedestrian and roadway safety would be implemented including visual and audible warning devices, appropriate pavement markings, and signage in the vicinity of grade crossings. As discussed in the Chapter 12: Noise, Quiet Zones are recommended for the majority of the grade crossings. Safety measures have been identified for each applicable grade crossing to accommodate these Quiet Zones, should they be applied for and granted. Figures showing the proposed improvements are included at the end of Chapter 12: Noise.

### 22.2.2.5. Station Safety and Security

Platforms would be equipped with security cameras as well as call-for-aid boxes. NJ TRANSIT would also work closely with municipal police departments in the study area to ensure that security needs are met. In addition, NJ TRANSIT would provide fire detection systems comprised of smoke detectors, alarm systems, standpipes and sprinkler systems in accordance with State Building Code requirements and supplemented by National Fire Protection Association standards where special hazards occur.

## 22.3. Environmental Review

### 22.3.1. North Bergen

#### 22.3.1.1. Existing Conditions

Currently, the Northern Branch Corridor serves only diesel-powered freight rail traffic which operates infrequently. In North Bergen, there are three grade crossings: 83<sup>rd</sup> Street, 91<sup>st</sup> Street, and Fairview Avenue/95<sup>th</sup> Street. All fall under municipal classification and none of them have grade-crossing protection.

#### 22.3.1.2. Potential Impacts and Mitigation

#### **No Build Alternative**

The rail freight operations and infrastructure are not expected to be affected under the No Build Alternative. Freight delivery by rail would continue along the Northern Branch corridor while the demand for such service remains. There are currently no plans to modify the grade-crossing protection.

#### **Light Rail to Tenafly (Preferred Alternative) and Light Rail to Englewood Route 4**

Both Light Rail to Tenafly (Preferred Alternative) and Light Rail to Englewood Route 4 are identical as they relate to potential safety and security issues through North Bergen.

*Impacts* – The Build Alternatives would introduce passenger rail service on the Northern Branch Corridor and include the rehabilitation of the existing rail right-of-way and the installation of overhead catenary and associated substations, as well as construction of a viaduct, a station and vehicle base facility (VBF) in North Bergen.

### **Rail Alignment**

The reintroduction of passenger rail service through the municipality will result in increased rail traffic with more frequent rail activity at grade crossings than currently exist. Protective devices would be installed at all grade crossings involving public rights-of-way. Safety improvements at grade crossings in North Bergen are noted in Table 22-1. Additionally, right-of-way safety will be provided by NJ TRANSIT's Rail Safety Education Program as detailed in Section 22.2.1 – Safety Education Program.

**Table 22-1: North Bergen Grade Crossing Locations**

<b>Location</b>	<b>Safety Improvement</b>
(1a) 83 <sup>rd</sup> Street	Closure
(1b) 85 <sup>th</sup> Street (New Crossing)	Crossing gates
(2) 91 <sup>st</sup> Street	Crossing gates
(3) Fairview Avenue/95 <sup>th</sup> Street	Crossing gates

As noted in Chapter 8: Community Facilities, NJ TRANSIT will develop an emergency service response plan with North Bergen emergency service providers prior to the initiation of passenger rail service in the project corridor. The emergency response plan includes several measures designed to educate emergency responders and the community about grade crossing issues and may include physical improvements and protocols designed to facilitate the movement of emergency responders across the rail right-of-way. The specific method of coordination will be determined through negotiations with the municipality.

Under both Build Alternatives the crossing at 83<sup>rd</sup> Street would be closed and a new crossing would be constructed at 85<sup>th</sup> Street. This would force public safety providers that utilize 83<sup>rd</sup> Street to change their current routes in order to access areas west of the right-of-way. Since the two streets are nearby, the use of 85<sup>th</sup> Street is anticipated to result in minimal re-routing. Additionally, emergency service providers may benefit from this project element as it would provide a safer roadway configuration with increased site distance than currently exists. Emergency service response times are not anticipated to be adversely impacted in North Bergen.

### **Station Areas**

Security at 91<sup>st</sup> Street Station is also a project consideration. The proposed service will operate from the early morning until after dark. The station will include ticket vending machines (TVMs) which are unmanned devices that automatically provide tickets, similar to those currently in operation at Hudson-Bergen Light Rail stations. NJ TRANSIT will install video surveillance equipment that is monitored from a remote NJ TRANSIT location. The purpose of the video surveillance is twofold: as a preventative safety measure for passengers at station areas; and to deter vandalism to TVMs and NJ TRANSIT property. Station lighting will be provided during operation of passenger service, which will function as an additional safety measure.

While the study area is not a high-crime location, reasonable measures will be required to help ensure the safety of passengers while they wait for, board, and alight the rail vehicles. This proposed station will include a parking area. While NJ TRANSIT does not assume liability for personal belongings, including cars parked in the parking lot, reasonable safety measures will be required to ensure the safety of passengers in the parking lot. NJ TRANSIT police will periodically patrol station areas and are responsible for responding to rail vehicle incidents. NJ TRANSIT police will work in concert with the local police jurisdiction to ensure that the security needs in the vicinity of the station area are met.

### **Construction Phase**

The Build Alternatives will require rail rehabilitation to Class I standards along with the construction of a new station at 91<sup>st</sup> Street. The 91<sup>st</sup> Street Station will be a low-level platform station and will comply with the Americans with Disabilities Act (ADA), including tactile warning strips at the edges of the platforms. Construction activity for the station platform is expected to be confined primarily to the existing Northern Branch right-of-way, which will require careful coordination with CSX to minimize impacts to freight operations during construction as well as to ensure construction worker and rail operator safety. The parking area for 91<sup>st</sup> Street Station will not require significant disturbance as the site is currently in use as a parking lot.

Additionally, since the light rail vehicles are powered by overhead catenary with substations located at approximately one-mile intervals, the Build Alternatives will introduce an additional construction element that will also require careful coordination with CSX.

*Mitigation* – The safety of passengers, operators, railroad workers and residents is of paramount concern to NJ TRANSIT. Several measures, identified in Section 22.2.2 – Safety and Security Measures, are proposed to enhance the safety and security along the project corridor during both construction and operation.

### **22.3.2. Fairview**

#### *22.3.2.1. Existing Conditions*

Currently, the Northern Branch Corridor serves only diesel-powered freight rail traffic which operates infrequently. There are no grade crossings along the rail alignment in the Borough of Fairview. The rail alignment crosses over two waterways in Fairview: Bellmans Creek and Wolf Creek.

#### *22.3.2.2. Potential Impacts and Mitigation*

### **No Build Alternative**

The rail freight operations and infrastructure are not expected to be affected under the No Build Alternative. Freight delivery by rail would continue along the Northern Branch corridor while the demand for such service remains. There are currently no plans to modify the grade-crossing protection.

### **Light Rail to Tenafly (Preferred Alternative ) and Light Rail to Englewood Route 4**

Both Light Rail to Tenafly (Preferred Alternative) and Light Rail to Englewood Route 4 are identical as they relate to potential safety and security issues through Fairview.

*Impacts* – The Build Alternatives would introduce passenger rail service on the Northern Branch Corridor and include the rehabilitation of the existing rail right-of-way and installation of overhead catenary in Fairview. No station would be developed within this municipality as only a very small portion of Fairview is located along the right-of-way. There are no grade crossings within Fairview and as a result there would be no impact to emergency response times. Overhead catenary wires would be installed along the existing right-of-way within Fairview. The Build Alternatives will require rail rehabilitation to Class I standards along with the reconstruction of bridges over Bellmans Creek and Wolf Creek. No significant adverse safety or security impacts are anticipated.

*Mitigation* – The safety of passengers, operators, railroad workers and residents is of paramount concern to NJ TRANSIT. Several measures, identified in Section 22.2.2 – Safety and Security Measures, are proposed to enhance the safety and security along the project corridor during both construction and operation.

### 22.3.3. Ridgefield

#### 22.3.3.1. Existing Conditions

Currently, the Northern Branch Corridor serves only diesel-powered freight rail traffic which operates infrequently. In Ridgefield, there are two grade crossings: one at a driveway near Wolf Creek and one at Linden Avenue. All fall under municipal classification and neither have grade-crossing protection.

#### 22.3.3.2. Potential Impacts and Mitigation

##### **No Build Alternative**

The rail freight operations and infrastructure are not expected to be affected under the No Build Alternative. Freight delivery by rail would continue along the Northern Branch corridor while the demand for such service remains. There are currently no plans to modify the grade-crossing protection.

##### **Light Rail to Tenafly (Preferred Alternative ) and Light Rail to Englewood Route 4**

Both Light Rail to Tenafly (Preferred Alternative) and Light Rail to Englewood Route 4 are identical as they relate to potential safety and security issues through Ridgefield.

*Impacts* – The Build Alternatives would introduce passenger rail service on the Northern Branch Corridor and include the rehabilitation of the existing rail right-of-way, installation of overhead catenary and associated substations, and construction of a station in Ridgefield.

##### **Rail Alignment**

The reintroduction of passenger rail service through the municipality will result in increased rail traffic with more frequent rail activity at grade crossings than currently exist. Protective devices would be installed at all grade crossings involving public rights-of-way. Safety improvements at grade crossings in Ridgefield are noted in Table 22-2. Additionally, right-of-way safety will be provided by NJ TRANSIT's Rail Safety Education Program as detailed in Section 22.2.1 – Safety Education Program.

**Table 22-2: Ridgefield Grade Crossing Locations**

Location	Safety Improvement
(4) Driveway (near Wolf Creek)	Crossing gates
(5) Linden Avenue	Four-quadrant gates and flashers

In Ridgefield residential and commercial development is primarily located east of the right-of-way. Public safety services are also located east of the right-of-way. Emergency service providers would also be able to access portions of Ridgefield west of the right-of-way via Hendricks Causeway, a grade-separated east-west roadway. No adverse impacts to emergency service response times are anticipated.

As noted in Chapter 8: Community Facilities, NJ TRANSIT will develop an emergency service response plan with Ridgefield emergency service providers prior to the initiation of passenger rail service in the project corridor. The emergency response plan includes several measures designed to educate emergency responders and the community about grade crossing issues and may include physical improvements and protocols designed to facilitate the movement of emergency responders across the rail right-of-way. The specific method of coordination will be determined through negotiations with the municipality.

##### **Station Areas**

Security at Ridgefield Station is also a project consideration. The proposed service will operate from the early morning until after dark. The station will include TVMs. NJ TRANSIT will install video surveillance equipment that is monitored from a remote NJ TRANSIT location. The purpose of the video

surveillance is twofold: as a preventative safety measure for passengers at station areas; and to deter vandalism to TVMs and NJ TRANSIT property. Station lighting will be provided during operation of passenger service, which will function as an additional safety measure.

While the study area is not a high-crime location, reasonable measures will be required to help ensure the safety of passengers while they wait for, board, and alight the rail vehicles. This proposed station will include a parking area. While NJ TRANSIT does not assume liability for personal belongings, including cars parked in the parking lot, reasonable safety measures will be required to ensure the safety of passengers in the parking lot. NJ TRANSIT police will periodically patrol station areas and are responsible for responding to rail vehicle incidents. NJ TRANSIT police will work in concert with the local police jurisdiction to ensure that the security needs in the vicinity of the station area are met.

### **Construction Phase**

The Build Alternatives will require rail rehabilitation to Class I standards along with the construction of the proposed Ridgefield Station. The station will be a low-level platform station and will comply with ADA, including tactile warning strips at the edges of the platforms. Construction activity for the station platform is expected to be confined primarily to the existing Northern Branch right-of-way, which will require careful coordination with CSX to minimize impacts to freight operations during construction as well as to ensure construction worker and rail operator safety.

Additionally, since the light rail vehicles are powered by overhead catenary with substations located at approximately one-mile intervals, the Build Alternatives will introduce an additional construction element that will also require careful coordination with CSX.

*Mitigation* – The safety of passengers, operators, railroad workers and residents is of paramount concern to NJ TRANSIT. Several measures, identified in Section 22.2.2 – Safety and Security Measures, are proposed to enhance the safety and security along the project corridor during both construction and operation.

### **22.3.4. Palisades Park**

#### *22.3.4.1. Existing Conditions*

Currently, the Northern Branch Corridor serves only diesel-powered freight rail traffic which operates infrequently. In Palisades Park there are three grade crossings, including West Ruby Avenue, Roosevelt Place, and West Central Boulevard. All fall under municipal classification and neither have grade-crossing protection.

#### *22.3.4.2. Potential Impacts and Mitigation*

### **No Build Alternative**

The rail freight operations and infrastructure are not expected to be affected under the No Build Alternative. Freight delivery by rail would continue along the Northern Branch corridor while the demand for such service remains. There are currently no plans to modify the grade-crossing protection.

### **Light Rail to Tenafly (Preferred Alternative ) and Light Rail to Englewood Route 4**

Both Light Rail to Tenafly (Preferred Alternative) and Light Rail to Englewood Route 4 are identical as they relate to potential safety and security issues through Palisades Park.

*Impacts* – The Build Alternatives would introduce passenger rail service on the Northern Branch Corridor and include the rehabilitation of the existing rail right-of-way as well as the installation of overhead catenary and associated substations, and construction of a station in Palisades Park.

### Rail Alignment

The reintroduction of passenger rail service through the municipality will result in increased rail traffic with more frequent rail activity at grade crossings than currently exist. Protective devices would be installed at all grade crossings involving public rights-of-way. Safety improvements at grade crossings in Palisades Park are noted in Table 22-3. Additionally, right-of-way safety will be provided by NJ TRANSIT's Rail Safety Education Program as detailed in Section 22.2.1 – Safety Education Program.

**Table 22-3: Palisades Park Grade Crossing Improvements**

Location	Safety Improvement
(6) West Ruby Avenue	Four-quadrant gates and flashers
(7) Roosevelt Place	Four-quadrant gates and flashers
(8) West Central Boulevard	Four-quadrant gates and flashers

In Palisades Park residential and commercial development is primarily located east of the right-of-way. Public safety services are also located east of the right-of-way. No adverse impacts to emergency service response times are anticipated. As noted in Chapter 8: Community Facilities, NJ TRANSIT will develop an emergency service response plan with Palisades Park emergency service providers prior to the initiation of passenger rail service in the project corridor. The emergency response plan includes several measures designed to educate emergency responders and the community about grade crossing issues and may include physical improvements and protocols designed to facilitate the movement of emergency responders across the rail right-of-way. The specific method of coordination will be determined through negotiations with the municipality.

### Station Areas

Security at the proposed Palisades Park Station is also a project consideration. The proposed service will operate from the early morning until after dark. The station will include TVMs. NJ TRANSIT will install video surveillance equipment that is monitored from a remote NJ TRANSIT location. The purpose of the video surveillance is twofold: as a preventative safety measure for passengers at station areas; and to deter vandalism to TVMs and NJ TRANSIT property. Station lighting will be provided during operation of passenger service, which will function as an additional safety measure.

While the study area is not a high-crime location, reasonable measures will be required to help ensure the safety of passengers while they wait for, board, and alight the rail vehicles. This proposed station will include a parking area. While NJ TRANSIT does not assume liability for personal belongings, including cars parked in the parking lot, reasonable safety measures will be required to ensure the safety of passengers in the parking lot. NJ TRANSIT police will periodically patrol station areas and are responsible for responding to rail vehicle incidents. NJ TRANSIT police will work in concert with the local police jurisdiction to ensure that the security needs in the vicinity of the station area are met.

### Construction Phase

The Build Alternatives will require rail rehabilitation to Class I standards along with the construction of the proposed Palisades Park Station. The station will be a low-level platform station and will comply with the ADA, including tactile warning strips at the edges of the platforms. Construction activity for the station platform is expected to be confined primarily to the existing Northern Branch right-of-way, which will require careful coordination with CSX to minimize impacts to freight operations during construction as well as to ensure construction worker and rail operator safety. The parking area for the proposed Palisades Park Station will require the demolition of existing industrial and commercial buildings.

Additionally, since the light rail vehicles are powered by overhead catenary with substations located at approximately one-mile intervals, the Build Alternatives will introduce an additional construction element that will also require careful coordination with CSX.

*Mitigation* – The safety of passengers, operators, railroad workers and residents is of paramount concern to NJ TRANSIT. Several measures, identified in Section 22.2.2 – Safety and Security Measures, are proposed to enhance the safety and security along the project corridor during both construction and operation.

### **22.3.5. Leonia**

#### *22.3.5.1. Existing Conditions*

Currently, the Northern Branch Corridor serves only diesel-powered freight rail traffic which operates infrequently. There are two grade crossings in Leonia, one at Fort Lee Road and a pedestrian crossing at Leonia High School. The Fort Lee Road grade crossing is under the jurisdiction of Bergen County.

#### *22.3.5.2. Potential Impacts and Mitigation*

##### **No Build Alternative**

The rail freight operations and infrastructure are not expected to be affected under the No Build Alternative. Freight delivery by rail would continue along the Northern Branch corridor while the demand for such service remains. There are currently no plans to modify the grade-crossing protection.

##### **Light Rail to Tenafly (Preferred Alternative ) and Light Rail to Englewood Route 4**

Both Light Rail to Tenafly (Preferred Alternative) and Light Rail to Englewood Route 4 are identical as they relate to potential safety and security issues through Leonia.

*Impacts* – The Build Alternatives would introduce passenger rail service on the Northern Branch Corridor and include the rehabilitation of the existing rail right-of-way, installation of overhead catenary and associated substations, and construction of a station in Leonia.

##### **Rail Alignment**

The reintroduction of passenger rail service through the municipality will result in increased rail traffic with more frequent rail activity at grade crossings than currently exist. Protective devices would be installed at all grade crossings involving public rights-of-way. Safety improvements at grade crossings in Leonia are noted in Table 22-4. Additionally, right-of-way safety will be provided by NJ TRANSIT's Rail Safety Education Program as detailed in Section 22.2.1 – Safety Education Program.

**Table 22-4: Leonia Grade Crossing Improvements**

<b>Location</b>	<b>Safety Improvement</b>
(9) Fort Lee Road	Four-quadrant gates and cantilevered mounted flashers
(10) Pedestrian Crossing at Leonia High School	Pedestrian gates, flashers, fencing, and removal of vegetation

Additionally within the municipality, a portion of the right-of-way runs through or adjacent to a number of sensitive uses, including Overpeck County Park and Leonia High School. The high school, located on the east side of the right-of-way, currently has an unprotected pedestrian crossing across the right-of-way to provide students with access to the athletic facilities and a parking lot on the west side of the right-of-way in Overpeck Park. Grade crossing protection consisting of pedestrian gates, signals, signage, and adjacent fencing would be installed at the existing pedestrian crossing, and vegetation that would block views toward the oncoming trains would be removed in order to maintain proper safety at the crossing. Right-of-way safety will be provided by NJ TRANSIT's Rail Safety Education Program as detailed in Section 22.2.1.

In Leonia residential and commercial development is primarily located east of the right-of-way. Public safety services in the municipality are also located east of the right-of-way. No adverse impacts to emergency service response times are anticipated. As noted in Chapter 8: Community Facilities, NJ TRANSIT will develop an emergency service response plan with Leonia emergency service providers prior to the initiation of passenger rail service in the project corridor. The emergency response plan includes several measures designed to educate emergency responders and the community about grade crossing issues and may include physical improvements and protocols designed to facilitate the movement of emergency responders across the rail right-of-way. The specific method of coordination will be determined through negotiations with the municipality.

### **Station Areas**

Security at the proposed Leonia Station is also a project consideration. The proposed service will operate from the early morning until after dark. The station will include TVMs. NJ TRANSIT will install video surveillance equipment that is monitored from a remote NJ TRANSIT location. The purpose of the video surveillance is twofold: as a preventative safety measure for passengers at station areas; and to deter vandalism to TVMs and NJ TRANSIT property. Station lighting will be provided during operation of passenger service, which will function as an additional safety measure.

While the study area is not a high-crime location, reasonable measures will be required to help ensure the safety of passengers while they wait for, board, and alight the rail vehicles. This proposed station will include a parking area. While NJ TRANSIT does not assume liability for personal belongings, including cars parked in the parking lot, reasonable safety measures will be required to ensure the safety of passengers in the parking lot. NJ TRANSIT police will periodically patrol station areas and are responsible for responding to rail vehicle incidents. NJ TRANSIT police will work in concert with the local police jurisdiction to ensure that the security needs in the vicinity of the station area are met.

### **Construction Phase**

The Build Alternatives will require rail rehabilitation to Class I standards along with the construction of the proposed Leonia Station. The station will be a low-level platform station and will comply with ADA, including tactile warning strips at the edges of the platforms. Construction activity for the station platform is expected to be confined primarily to the existing Northern Branch right-of-way, which will require careful coordination with CSX to minimize impacts to freight operations during construction as well as to ensure construction worker and rail operator safety.

Additionally, since the light rail vehicles are powered by overhead catenary with substations located at approximately one-mile intervals, the Build Alternatives will introduce an additional construction element that will also require careful coordination with CSX.

*Mitigation* – The safety of passengers, operators, railroad workers and residents is of paramount concern to NJ TRANSIT. Several measures, identified in Section 22.2.2 – Safety and Security Measures, are proposed to enhance the safety and security along the project corridor during both construction and operation.

## **22.3.6. Englewood**

### *22.3.6.1. Existing Conditions*

Currently, the Northern Branch Corridor serves only diesel-powered freight rail traffic which operates infrequently. A total of eight grade crossings in Englewood include Brookside Lane, West Forest Avenue, Englewood Avenue, Palisade Avenue, Demarest Avenue, Hamilton Avenue, Hudson Avenue, and Ivy Lane. All of the roadway crossings fall under municipal classification with the exception of West Forest Avenue, Palisades Avenue, and Ivy Lane which are under the jurisdiction of Bergen County.

### 22.3.6.2. Potential Impacts and Mitigation

#### **No Build Alternative**

The rail freight operations and infrastructure are not expected to be affected under the No Build Alternative. Freight delivery by rail would continue along the Northern Branch corridor while the demand for such service remains. There are currently no plans to modify the grade-crossing protection.

#### **Light Rail to Tenafly (Preferred Alternative)**

*Impacts* – This Build Alternative would introduce passenger rail service on the Northern Branch Corridor and includes the rehabilitation of the existing rail right-of-way, installation of overhead catenary and associated substations, and construction of stations at Englewood Route 4, Englewood Town Center, and Englewood Hospital as well as a proposed optional VBF.

#### **Rail Alignment**

The reintroduction of passenger rail service through the municipality will result in increased rail traffic with more frequent rail activity at grade crossings than currently exist. Protective devices would be installed at all grade crossings involving public rights-of-way. Safety improvements at grade crossings in Englewood are noted in Table 22-5. Additionally, right-of-way safety will be provided by NJ TRANSIT's Rail Safety Education Program as detailed in Section 22.2.1 – Safety Education Program.

**Table 22-5: Englewood Grade Crossing Improvements**

<b>Location</b>	<b>Safety Improvement</b>
(11) Brookside Lane	Four-quadrant gates and flashers
(12) West Forest Avenue	Four-quadrant gates and flashers
(13) Englewood Avenue	Four-quadrant gates and flashers
(14) Palisade Avenue	Four-quadrant gates, flashers, and pedestrian gates
(15) Demarest Avenue	Four-quadrant gates and flashers
(16) Hamilton Avenue	Four-quadrant gates and flashers
(17) Hudson Avenue	Four-quadrant gates and flashers
(18) Ivy Lane	Four-quadrant gates and flashers

There is substantial development on both sides of the right-of-way in Englewood. Emergency service providers, including police, fire, and ambulance are located on the west side of the right-of-way. Increased rail activity will affect the accessibility of grade crossings, which may result in increased response time for emergency responders attending to needs east of the right-of-way. The short time that it will take, approximately one minute, for two-to three-car trains to pass through a grade crossing will result in no significant impacts. NJ TRANSIT will work with Englewood to develop appropriate grade crossing protection measures and spread awareness regarding the new rail service to emergency service providers. To that end, NJ TRANSIT maintains a dedicated service unit that will coordinate transit service with emergency service providers. It is anticipated that coordination between NJ TRANSIT dispatch and emergency service providers would alleviate grade crossing issues as they apply to the movement of emergency vehicles.

#### **Station Areas**

Security at stations at Englewood Route 4, Englewood Town Center and Englewood Hospital is also a project consideration. The proposed service will operate from the early morning until after dark. The stations will include TVMs. NJ TRANSIT will install video surveillance equipment that is monitored from a remote NJ TRANSIT location. The purpose of the video surveillance is twofold: as a preventative safety measure for passengers at station areas; and to deter vandalism to TVMs and NJ

TRANSIT property. Station lighting will be provided during operation of passenger service, which will function as an additional safety measure.

While the study area is not a high-crime location, reasonable measures will be required to help ensure the safety of passengers while they wait for, board, and alight the rail vehicles. Englewood Town Center Station and Englewood Hospital Station would be walk-up stations with no parking areas proposed. Englewood Route 4 Station will include a parking area. While NJ TRANSIT does not assume liability for personal belongings, including cars parked in the parking lots, reasonable safety measures will be required to ensure the safety of passengers in the parking lots. NJ TRANSIT police will periodically patrol station areas and are responsible for responding to rail vehicle incidents. NJ TRANSIT police will work in concert with the local police jurisdiction to ensure that the security needs in the vicinity of the station area are met.

### **Construction Phase**

The Build Alternatives will require rail rehabilitation to Class I standards along with the construction of the proposed stations in Englewood. The stations will be low-level platform stations and will comply with ADA, including tactile warning strips at the edges of the platforms. Construction activity for the station platforms is expected to be confined primarily to the existing Northern Branch right-of-way, which will require careful coordination with CSX to minimize impacts to freight operations during construction as well as to ensure construction worker and rail operator safety. The parking area for the proposed Englewood Route 4 Station will require the demolition of an existing industrial building.

Additionally, since the light rail vehicles are powered by overhead catenary with substations located at approximately one-mile intervals, the Build Alternatives will introduce an additional construction element that will also require careful coordination with CSX.

*Mitigation* – The safety of passengers, operators, railroad workers and residents is of paramount concern to NJ TRANSIT. Several measures, identified in Section 22.2.2 – Safety and Security Measures, are proposed to enhance the safety and security along the project corridor during both construction and operation.

### **Light Rail to Englewood Route 4**

*Impacts* – This Build Alternative would introduce passenger rail service on the Northern Branch Corridor and includes the rehabilitation of the existing rail right-of-way, installation of overhead catenary and associated substations, extending to just north of Route 4, and construction of a station at Englewood Route 4, as well as a proposed optional VBF.

### **Rail Alignment**

The reintroduction of passenger rail service through the municipality will result in increased rail traffic with more frequent rail activity at grade crossings than currently exist. Protective devices would be installed at all grade crossings involving public rights-of-way up to Route 4, including Brookside Lane, West Forest Avenue, and Englewood Avenue. Additionally, due to the operation of freight trains at night, improvements required for Quiet Zones would continue through the remainder of Englewood. Therefore, the safety improvements would be the same as those described for Light Rail to Tenafly (Preferred Alternative) and listed in Table 22-5. Additionally, right-of-way safety will be provided by NJ TRANSIT's Rail Safety Education Program as detailed in Section 22.2.1 – Safety Education Program.

The reintroduction of passenger rail service up to Englewood Route 4 will result in increased rail traffic with more frequent grade crossings than currently exist through south Englewood. The implementation of appropriate safety elements, grade crossing protection, and other safety measures to help ensure pedestrian and roadway safety would be the same as described for Light Rail to Tenafly (Preferred

Alternative). Right-of-way safety will be provided by NJ TRANSIT's Rail Safety Education Program as detailed in Section 22.2.1.

The Build Alternative would not bisect areas north of Route 4 including the downtown area of Englewood. Emergency service providers located west of the right-of-way and responding to situations north of Route 4 would be unimpeded. Increased rail activity terminating at Englewood Route 4 Station could potentially affect the accessibility of emergency responders attending to needs in south Englewood. The short time that it will take, approximately one minute, for two-to three-car trains to pass through a grade crossing will result in no significant impacts. NJ TRANSIT will work with the local municipalities to develop appropriate grade crossing protection measures and spread awareness regarding the new rail service to emergency service providers. To that end, NJ TRANSIT maintains a dedicated service unit that will coordinate transit service with emergency service providers. It is anticipated that coordination between NJ TRANSIT dispatch and emergency service providers would alleviate grade crossing issues as they apply to the movement of emergency vehicles.

### **Station Areas**

Security at the Englewood Route 4 station is also a project consideration. The proposed service will operate from the early morning until after dark. The station will include TVMs. NJ TRANSIT will install video surveillance equipment that is monitored from a remote NJ TRANSIT location. The purpose of the video surveillance is twofold: as a preventative safety measure for passengers at station areas; and to deter vandalism to TVMs and NJ TRANSIT property. Station lighting will be provided during operation of passenger service, which will function as an additional safety measure.

While the study area is not a high-crime location, reasonable measures will be required to help ensure the safety of passengers while they wait for, board, and alight the rail vehicles. Englewood Route 4 Station will include a parking area. While NJ TRANSIT does not assume liability for personal belongings, including cars parked in the parking lot, reasonable safety measures will be required to ensure the safety of passengers in the parking lot. NJ TRANSIT police will periodically patrol station areas and are responsible for responding to rail vehicle incidents. NJ TRANSIT police will work in concert with the local police jurisdiction to ensure that the security needs in the vicinity of the station area are met.

### **Construction Phase**

Light Rail to Englewood Route 4 will require rail rehabilitation to Class I standards for the alignment just past the Route 4 station, along with the construction of the proposed station. The station will have a low-level platform and will comply with ADA, including tactile warning strips at the edges of the platforms. Construction activity for the station platform is expected to be confined primarily to the existing Northern Branch right-of-way, which will require careful coordination with CSX to minimize impacts to freight operations during construction as well as to ensure construction worker and rail operator safety. The parking area for the proposed Englewood Route 4 Station will require the demolition of an existing industrial building.

Additionally, since the light rail vehicles are powered by overhead catenary with substations located at approximately one-mile intervals, the alternative will introduce an additional construction element that will also require careful coordination with CSX.

*Mitigation* – The safety of passengers, operators, railroad workers and residents is of paramount concern to NJ TRANSIT. Several measures, identified in Section 22.2.2 – Safety and Security Measures, are proposed to enhance the safety and security along the project corridor during both construction and operation.

### 22.3.7. Tenafly

#### 22.3.7.1. Existing Conditions

Currently, the Northern Branch Corridor serves only diesel-powered freight rail traffic which operates infrequently. There are a total of five grade crossings in Tenafly including Westervelt Avenue, West/East Clinton Avenue, Washington Street, Riveredge Road/Jay Street, and Central Avenue. All of the roadway crossings fall under municipal classification with the exception of West/East Clinton Avenue and Riveredge Road/Jay Street which are under the jurisdiction of Bergen County.

#### 22.3.7.2. Potential Impacts and Mitigation

##### **No Build Alternative**

The rail freight operations and infrastructure are not expected to be affected under the No Build Alternative. Freight delivery by rail would continue along the Northern Branch corridor while the demand for such service remains. There are currently no plans to modify the grade-crossing protection.

##### **Light Rail to Tenafly (Preferred Alternative)**

*Impacts* – This Build Alternative would introduce passenger rail service on the Northern Branch Corridor and includes the rehabilitation of the existing rail right-of-way, installation of overhead catenary and associated substations, and construction of stations at Tenafly Town Center and Tenafly North.

##### **Rail Alignment**

The reintroduction of passenger rail service through the municipality will result in increased rail traffic with more frequent rail activity at grade crossings than currently exist. Protective devices would be installed at all grade crossings involving public rights-of-way. Safety improvements at grade crossings in Tenafly are noted in Table 22-6. Additionally, right-of-way safety will be provided by NJ TRANSIT's Rail Safety Education Program as detailed in Section 22.2.1 – Safety Education Program.

**Table 22-6: Tenafly Grade Crossing Improvements**

Location	Safety Improvement
(19) Westervelt Avenue	Four-quadrant gates and flashers
(20) West/East Clinton Avenue	Four-quadrant gates, pedestrian gates, and cantilevered mounted flashers
(21) Washington Street	Four-quadrant gates and flashers
(22) Riveredge Road/Jay Street	Four-quadrant gates and flashers
(23) Central Avenue	Four-quadrant gates and flashers

There is substantial development on both sides of the right-of-way in Tenafly. Emergency service providers, including police, fire, and ambulance, are located on the west side of the right-of-way. Increased rail activity will affect the accessibility of grade crossings, which may result in increased response time for emergency responders attending to needs east of the right-of-way. The short time that it will take, approximately one minute, for two-to three-car trains to pass through a grade crossing will result in no significant impacts. NJ TRANSIT will work with the local municipalities to develop appropriate grade crossing protection measures and spread awareness regarding the new rail service to emergency service providers. To that end, NJ TRANSIT maintains a dedicated service unit that will coordinate transit service with emergency service providers. It is anticipated that coordination between NJ TRANSIT dispatch and emergency service providers would alleviate grade crossing issues as they apply to the movement of emergency vehicles.

**Station Areas**

Security at the proposed Tenafly Town Center Station and Tenafly North Station is also a project consideration. The proposed service will operate from the early morning until after dark. The stations will include TVMs. NJ TRANSIT will install video surveillance equipment that is monitored from a remote NJ TRANSIT location. The purpose of the video surveillance is twofold: as a preventative safety measure for passengers at station areas; and to deter vandalism to TVMs and NJ TRANSIT property. Station lighting will be provided during operation of passenger service, which will function as an additional safety measure.

Protecting the safety of passengers is of paramount concern to NJ TRANSIT, and while the study area is not a high-crime location, reasonable measures will be required to help ensure the safety of passengers while they wait for, board, and alight the rail vehicles. Tenafly Town Center Station will be a walk-up station with a small parking area proposed for handicapped parking and a drop-off/pick-up area. Tenafly North Station will include a parking area. While NJ TRANSIT does not assume liability for personal belongings, including cars parked in the parking lots, reasonable safety measures will be required to ensure the safety of passengers in the parking lots. NJ TRANSIT police will periodically patrol station areas and are responsible for responding to rail vehicle incidents. NJ TRANSIT police will work in concert with the local police jurisdiction to ensure that the security needs in the vicinity of the station area are met.

**Construction Phase**

The Build Alternative will require rail rehabilitation to Class I standards along with the construction of the proposed stations in Tenafly. The stations will be low-level platform stations and will comply with the ADA, including tactile warning strips at the edges of the platforms. Construction activity for the station platforms is expected to be confined primarily to the existing Northern Branch right-of-way, which will require careful coordination with CSX to minimize impacts to freight operations during construction as well as to ensure construction worker and rail operator safety. The parking area for the proposed Tenafly North Station will require the demolition of existing buildings.

Additionally, since the light rail vehicles are powered by overhead catenary with substations located at approximately one-mile intervals, the Build Alternatives will introduce an additional construction element that will also require careful coordination with CSX.

*Mitigation* – The safety of passengers, operators, railroad workers and residents is of paramount concern to NJ TRANSIT. Several measures, identified in Section 22.2.2 – Safety and Security Measures, are proposed to enhance the safety and security along the project corridor during both construction and operation.

**Light Rail to Englewood Route 4**

This Build Alternative terminates at the proposed Englewood Route 4 Station. Consequently, resources located north of the proposed Englewood Route 4 Station including station sites and grade crossings in Tenafly will not be affected by this Build Alternative.

*Impacts* – The reintroduction of passenger rail service along the alignment would require freight trains to operate at night. As discussed in Section 22.2.2.4 – Grade Crossings, Quiet Zones are proposed to mitigate noise. To accommodate the Quiet Zones, the safety improvements described above for Light Rail to Tenafly (Preferred Alternative) and listed in Table 22-6 will also be made for Light Rail to Englewood Route 4.

*Mitigation* – None required.

### 22.3.8. Areas North of Tenafly

*Impacts* – FRA regulations require that light rail vehicles be separated from heavy rail and freight rail service. Accordingly, the Northern Branch project proposes temporal separation which would result in freight service shifting to overnight hours to allow light rail service to operate during the day. The change in freight service affects the entire system over which freight rail travels. As such, regardless of the alternative, freight service from North Bergen to Northvale (the northern terminus of the Northern Branch line) will be shifted to the overnight hours. Consequently, there is no difference between Light Rail to Tenafly (Preferred Alternative) and Light Rail to Englewood Route 4 in terms of safety and security issues north of Tenafly.

There are 11 grade crossings in municipalities north of Tenafly. The crossings and corresponding Quiet Zone safety improvements are identified in Table 22-7.

**Table 22-7: Grade Crossing Locations North of Tenafly**

Location	Safety Improvement
(24) Madison Avenue, Cresskill	Four-quadrant gates and cantilevered mounted flashers
(25) Union Avenue, Cresskill	Four-quadrant gates and cantilevered mounted flashers
(26) <i>Pedestrian Crossing at West Morningside, Cresskill</i>	Pedestrian gates, flashers, fencing, and removal of vegetation
(27) Hardenburgh Avenue, Demarest	Four-quadrant gates and flashers
(28) Demarest Avenue, Closter	Four-quadrant gates and flashers
(29) High Street, Closter	Four-quadrant gates and flashers
(30) Closter Dock Road, Closter	Four-quadrant gates and flashers
(31) Blanche Avenue, Closter	Four-quadrant gates and flashers
(32) Broadway Avenue, Norwood	Four-quadrant gates and flashers
(33) Paris Avenue, Northvale	Four-quadrant gates and flashers
(34) Pierron Street, Northvale	Four-quadrant gates and flashers

Project impacts north of Tenafly will be confined to changes to the freight service schedule to reduce interference with passenger service on the existing Northern Branch right-of-way during daytime and evening passenger service hours. Consequently, no construction-related safety impacts are anticipated in areas north of Tenafly. During operation of the proposed service for Light Rail to Tenafly (Preferred Alternative) and Light Rail to Englewood Route 4, nighttime freight service will occur where presently it does not.

*Mitigation* – None required.

### 22.4. Summary of Potential Environmental Effects

As summarized in Table 22-8, there are 34 existing grade crossings within eleven municipalities and two counties in the project area. Under both Build Alternatives the crossing at 83<sup>rd</sup> Street would be closed and a new crossing would be constructed at 85<sup>th</sup> Street, leaving the number of crossings at 34. The safety improvements proposed for each grade crossing to accommodate proposed Quiet Zones are listed in Table 22-9. Safety improvements to grade crossings north of Englewood Route 4 would occur under either Build Alternative due to the shifting of freight rail service to overnight hours.

**Table 22-8: Northern Branch Grade Crossing Locations**

<b>Location</b>	<b>Municipality</b>	<b>Safety Improvement</b>
<b>Light Rail to Englewood (Preferred Alternative) and Light Rail to Englewood Route 4</b>		
(1a) 83 <sup>rd</sup> Street	North Bergen	Close
(1b) 85 <sup>th</sup> Street (New Crossing)	North Bergen	Crossing gates
(2) 91 <sup>st</sup> Street	North Bergen	Crossing gates
(3) Fairview Avenue/95 <sup>th</sup> Street	North Bergen	Crossing gates
(4) Driveway (near Wolf Creek)	Ridgefield	Crossing gates
(5) Linden Avenue	Ridgefield	Four-quadrant gates and flashers
(6) West Ruby Avenue	Palisades Park	Four-quadrant gates and flashers
(7) Roosevelt Place	Palisades Park	Four-quadrant gates and flashers
(8) West Central Boulevard	Palisades Park	Four-quadrant gates and flashers
(9) Fort Lee Road	Leonia	Four-quadrant gates and cantilevered mounted flashers
(10) <i>Pedestrian Crossing at Leonia High School</i>	Leonia	Pedestrian gates, flashers, fencing, and removal of vegetation
(11) Brookside Lane	Englewood	Four-quadrant gates and flashers
(12) West Forest Avenue	Englewood	Four-quadrant gates and flashers
(13) Englewood Avenue	Englewood	Four-quadrant gates and flashers
<b>Light Rail to Englewood (Preferred Alternative) continued</b>		
(14) Palisade Avenue	Englewood	Four-quadrant gates, flashers, and pedestrian gates
(15) Demarest Avenue	Englewood	Four-quadrant gates and flashers
(16) Hamilton Avenue	Englewood	Four-quadrant gates and flashers
(17) Hudson Avenue	Englewood	Four-quadrant gates and flashers
(18) Ivy Lane	Englewood	Four-quadrant gates and flashers
(19) Westervelt Avenue	Tenafly	Four-quadrant gates and flashers
(20) West/East Clinton Avenue	Tenafly	Four-quadrant gates, pedestrian gates, and cantilevered mounted flashers
(21) Washington Street	Tenafly	Four-quadrant gates and flashers
(22) Riveredge Road/Jay Street	Tenafly	Four-quadrant gates and flashers
(23) Central Avenue	Tenafly	Four-quadrant gates and flashers
<b>Areas North of Tenafly</b>		
(24) Madison Avenue	Cresskill	Four-quadrant gates and cantilevered mounted flashers
(25) Union Avenue	Cresskill	Four-quadrant gates and cantilevered mounted flashers
(26) <i>Pedestrian Crossing at West Morningside</i>	Cresskill	Pedestrian gates, flashers, fencing, and removal of vegetation
(27) Hardenburgh Avenue	Demarest	Four-quadrant gates and flashers
(28) Demarest Avenue	Closter	Four-quadrant gates and flashers
(29) High Street	Closter	Four-quadrant gates and flashers
(30) Closter Dock Road	Closter	Four-quadrant gates, flashers, and close secondary driveway
(31) Blanche Avenue	Closter	Four-quadrant gates and flashers
(32) Broadway Avenue	Norwood	Four-quadrant gates and flashers
(33) Paris Avenue	Northvale	Four-quadrant gates and flashers
(34) Pierron Street	Northvale	Four-quadrant gates and flashers

Source: Jacobs, 2009.

Under both Build Alternatives, site and right-of-way development would not involve unusual or unusually dangerous construction activities, procedures or locations that would pose significant safety or security impacts. The safety of passengers, operators, railroad workers and residents is of paramount concern to NJ TRANSIT. While no significant safety and security impacts have been identified for the alternatives considered, several measures are proposed to enhance the safety and security along the project corridor during both construction and operation. These measures range from safety improvements at grade crossings to station security involving lighting, surveillance, and patrolling of station areas.

During project development, NJ TRANSIT will coordinate with emergency providers and school districts and busing companies that serve the study area and who may be affected by the increased frequency of grade crossings. NJ TRANSIT and local municipalities, separately or in cooperation, would undertake a public information safety campaign in the project area to brief local residents on the implementation of passenger rail service.