

3.1 INTRODUCTION

This chapter examines the potential impacts of the Proposed Action in accordance with the NEPA. As described in the following sections, the Proposed Action would provide much-needed parking for Metro-North customers. At the same time, it is anticipated that the Proposed Action would not result in significant adverse impacts on the built and natural environment.

The chapter is divided into the four sections.

- Section 3.2, “Environmental Screening Analysis,” discusses those impact areas where, due to the nature of the Proposed Action and the characteristics of its location and surrounding environment, the Proposed Action inherently has no significant adverse impact. Specifically, the environmental subject areas discussed in Section 3.2 are:
 - Land Use and Social Conditions (land use and zoning; displacement and relocation; economic conditions; community impacts);
 - Parklands and Open Space;
 - Infrastructure and Energy;
 - Geology Soils and Topography;
 - Natural Resources; and
 - Safety and Security.
- Section 3.3, “Detailed Environmental Analysis,” focuses on those areas for which more extensive analysis was necessary to determine if mitigation would be required. The environmental subject areas discussed in Section 3.3 are:
 - Cultural Resources (archaeological and architectural resources);
 - Visual and Aesthetic Conditions;
 - Transportation (traffic, parking, transit, and pedestrians);
 - Air Quality;
 - Noise and Vibration;
 - Contaminated Materials;
 - Construction Impacts;
 - Environmental Justice; and
 - Commitment of Environmental Resources.
- Section 3.4, “Cumulative Impacts,” assesses whether the Proposed Action in combination with other changes in the area could result in cumulative impacts on the environment.
- Section 3.5, “Conclusion,” provides a summary of the environmental analysis presented in Sections 3.2 through 3.4.

3.2 ENVIRONMENTAL SCREENING ANALYSIS

3.2.1 LAND USE AND SOCIAL CONDITIONS

3.2.1.1 LAND USE AND ZONING

The project site is located across Haarlem Avenue from the North White Plains Metro-North station over ¼ mile north of Interstate 287 in the City of White Plains, Westchester County, New York. The project site is currently occupied by a parking garage, surface parking lot, a Nextel antenna and equipment shed, and a utility building and associated chimney for the adjacent Metro-North office building at 525 North Broadway.¹

Figure 3-1 shows the land uses in the vicinity of the project site. The areas immediately adjacent to the project site and east of the railroad tracks are primarily occupied by the train station, parking areas for the train station, office buildings, and a few retail establishments. Other uses east of the railroad tracks in the vicinity of the project site include manufacturing, light-industrial, retail, community facilities, single-family residential, and multi-family residential. West of the railroad tracks, land uses include transportation (parking lots for the North White Plains station and the Bronx River Parkway) and recreational (Bronx River Parkway Reservation). Aside from the Proposed Action, future development is not planned in the vicinity of the project site at this time.

As shown in **Figure 3-2**, the project site is zoned LI (Light-Industrial). Permitted principal uses in this zoning district include municipal parking lots or garages.

The Proposed Action would not constitute a substantial amount of new development, nor would it differ markedly from the existing uses in the surrounding area. Therefore, it would not result in significant impacts on land use.

The Proposed Action would be consistent with existing zoning regulations in the City of White Plains. The Proposed Action also would be consistent with recommendations in the City of White Plains Comprehensive Plan, which suggest that parking in the railroad station area/Route 22 corridor should be increased to prevent negative impacts on abutting residential neighborhoods. In addition, the Proposed Action would be consistent with policies contained in “Westchester 2025”—a Westchester County policy and planning document—specifically that local planning policies “support transportation alternatives that improve the mobility choices of workers, consumers and residents thereby improving air quality by enhancing the efficiency and effectiveness of public transportation and reducing solo driving.”

3.2.1.2 DISPLACEMENT AND RELOCATION

The project site does not contain residential uses (see **Figure 3-1**). The only active business is the existing parking garage, which is owned by Metro-North. The Proposed Action would replace the parking garage with a larger facility that would be constructed entirely on existing Metro-North property. The project site also includes a Nextel antenna and its associated equipment shed on a parcel owned by Metro-North. This facility would be relocated in

¹ The existing parking garage at 50 Haarlem Avenue, utility building and associated chimney, surface lot, and office building at 525 North Broadway are a group of parcels owned by Metro-North. However, the project site for the Proposed Action is comprised only of the parking garage, the utility building and the associated chimney, the surface lot including emergency generators, and the Nextel antenna and associated utility shed.

consultation with Nextel. Therefore, the Proposed Action would not require land acquisition, nor would it result in the displacement and/or relocation of residences or employees.

3.2.1.3 ECONOMIC IMPACTS

Implementation of the Proposed Action would not require the displacement of residents or employees. The Proposed Action would provide for a new parking garage for Metro-North customers, and construction and operation of the Proposed Action would provide new employment opportunities. The garage may also include approximately 1,000 square feet (sf) of retail space to serve Metro-North customers, which could employ three to four people. The Proposed Action would also not constitute a substantial amount of new development, nor would it differ markedly from existing uses in the area. Therefore, overall, the economic impacts of the Proposed Action would be beneficial.

3.2.1.4 COMMUNITY IMPACTS

As described in Section 3.3.1.1, the Proposed Action would replace an existing parking garage with a new, expanded garage and would not conflict with surrounding land uses, land use policy or other public plans for the area, nor would it change land use character or result in significant land use impacts. The Proposed Action would also not result in substantial changes to socioeconomic conditions. As discussed in Sections 3.3.2, 3.3.3, 3.3.4, and 3.3.6 below, the Proposed Action would also not result in any significant adverse impacts in the areas of aesthetic conditions, historic resources, traffic, or noise. Overall, the Proposed Action would not result in significant adverse impacts on community character.

3.2.1.5 CONCLUSION

Overall, the Proposed Action would not result in significant adverse impacts on land use and social conditions.

3.2.2 PARKLAND AND OPEN SPACE

As shown in **Figure 3-1**, the project site does not contain parkland or recreational open space. The nearest open space resource is the Bronx River Parkway Reservation (BRPR), which is located on the opposite side of the North White Plains station beyond the existing surface parking lots. The Proposed Action would not result in any alteration of the BRPR, and as described in Section 3.3.3 below, it would be barely visible to users of the BRPR. Since the Proposed Action would not displace or impair parkland or open space in the area, it would not result in significant adverse impacts to parkland and open space.

3.2.3 INFRASTRUCTURE, UTILITIES, AND ENERGY

3.2.3.1 ELECTRICITY AND GAS SERVICE

The Proposed Action would use existing electrical and gas connections to the project site. The Proposed Action would result in a larger parking garage on the project site, which would generate greater electrical demand for lighting and security systems, but the existing power grid is sufficient to support the expanded use on the project site. It is not anticipated that the new facility would generate substantial, if any demand for gas service. Since new demand from the Proposed Action would not be substantial, the Proposed Action would not result in significant adverse impacts on the supply of electricity or gas to the area.

3.2.3.2 WATER AND SEWER SERVICE

The Proposed Action would result in minimal added site demand for water and sewer services. This demand would result from washing, cleaning, watering of landscaping, and general maintenance of the facility. The proposed facility may also provide a bathroom for staff and possibly 1,000 sf of retail use, both of which would have some modest demand for water and sewer, but these demands would be accommodated by the existing water supply and sanitary sewer systems. A separate municipal water service connection would also be provided to the garage and would be sized for fire fighting purposes. Overall, this demand is very minor and is not expected to result in any significant adverse impacts to local water supply collection and treatment systems.

3.2.3.3 STORMWATER MANAGEMENT

As with existing conditions, stormwater from the project site would be discharged to municipal catch basins, which flows into pipes running under the Metro-North right-of-way. These pipes then discharge to drainage structures on the west of the railroad tracks and ultimately into the Bronx River. The project site is currently impervious, and the amount of impervious coverage would not be increased by the Proposed Action. The Proposed Action would qualify as a redevelopment under the New York State Department of Environmental Conservation (NYSDEC) and would be required to include Best Management Practices to manage the quality of stormwater discharge and to comply with applicable requirements of that agency's General Permit for Stormwater Discharges from Construction Activity. These practices would improve water quality as compared to existing conditions. Therefore, the Proposed Action would not result in significant adverse impacts on stormwater management.

3.2.3.4 CONCLUSION

Overall, the Proposed Action would not result in significant adverse impacts on infrastructure and energy.

3.2.4 GEOLOGY, SOILS, AND TOPOGRAPHY

The project site is occupied by a parking garage, a surface lot, and a utility building and associated chimney. The soils of the project site are mapped by the United States Department of Agriculture as Urban land (Uf), signifying that they have been subjected to varying degrees of disturbance and alteration from their natural state. Soil encountered during a site investigation comprised primarily silty fine sand and gravel in the upper 12 feet and fine sand with clays from 12 to 20 feet below grade. Groundwater was encountered at approximately 20 feet below grade and, based on a well elevation survey, was determined to flow in a southerly direction. Given the nature of the soil on-site, there would be no constraints with respect to foundation construction, and standard sediment control measures during construction would be sufficient to control erosion. Therefore, the Proposed Action would not result in significant adverse impacts on geology, soils, and topography.

3.2.5 NATURAL RESOURCES

3.2.5.1 TERRESTRIAL RESOURCES

The project site is fully improved and does not contain natural features except for street trees along Haarlem Avenue. The project site does not provide substantial habitat for plants and animals. Therefore, the Proposed Action would not result in significant adverse impacts on terrestrial resources.

3.2.5.2 FLOODPLAINS

As per Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map, panel 360923, Town of North Castle, the project site is not included within the 100-year (area with a 1 percent chance of flooding each year) or 500-year (area with a 0.2 percent of flooding each year) floodplains. Therefore, the Proposed Action would not result in significant adverse impacts on floodplains.

3.2.5.3 NAVIGABLE WATERWAYS AND COASTAL ZONES

The project site is not within or near a navigable waterway. The closest water body to the project site is the Bronx River, which is located 625 feet west of the project site. The Bronx River is not designated a federally regulated navigable waterway at this location according to US Coast Guard and US Army Corps of Engineers standards. In addition, the project site is not within the New York State Coastal Zone Boundary, and therefore, further analysis is not necessary.

3.2.5.4 WETLANDS AND ECOLOGICALLY SENSITIVE AREAS

The project site is fully developed and does not contain wetlands, and, as noted above, stormwater would be discharged to the local storm sewer system. Therefore, the Proposed Action would not result in significant adverse impacts on wetlands.

3.2.5.5 WATER QUALITY

The New York State Water Quality 2004 Report indicates that the portion of the Bronx River, located about 625 feet west of the project site is impaired by high-oxygen-demand pollutants in urban/stormwater runoff, which has resulted in low dissolved oxygen (DO) levels in the river. As described in Section 3.2.3.3 above, stormwater generated on the project site would be discharged to the Bronx River but, as required by NYSDEC, the Proposed Action would include Best Management Practices to control the quality of water discharged from the site and comply with applicable requirements of that agency's General Permit for Stormwater Discharges from Construction Activity. With these Best Management Practices, the quality of stormwater discharged from the site after construction would be better than the quality of the stormwater currently discharging from the site, and, therefore, the Proposed Action would not result in significant adverse impacts on water quality.

3.2.5.6 THREATENED AND ENDANGERED SPECIES

Information on endangered, threatened, special concern, and rare species within ½ mile of the project site was requested from the National Marine Fisheries Service (NMFS) and New York Natural Heritage Program (NYNHP). On September 16, 2009, NYNHP confirmed that no state- or federally listed species or communities are located within ½ mile of the project site. On September, 18, 2009, NMFS indicated that no endangered, threatened, or special concern species are likely to occur within or in the vicinity of the project site. Based on this correspondence, and the highly developed nature of the project site, no significant adverse impacts to endangered, threatened, special concern, or rare species are expected as a result of the Proposed Action.

3.2.5.7 CONCLUSION

The Proposed Action would not result in significant adverse impacts on natural resources.

3.2.6 SAFETY AND SECURITY

Construction of the Proposed Action would comply with all federal and state safety requirements, including National Fire Protection Standards (NFPA) 30 and 30A, National Electrical Code (NFPA 70), and the International Building Code (IBC). Construction activities would follow regulations and codes put forth by the Occupational Safety and Health Administration (OSHA), Building Officials, and Code Administration. Once operational, the garage would include adequate lighting and other measures to protect its future users. Signage along Haarlem Avenue would alert pedestrians of the active driveway, and internal signage would be provided to caution motorists to be aware of pedestrian activity. Therefore, the Proposed Action would not result in significant adverse impacts to public safety and security.

3.3 DETAILED ENVIRONMENTAL IMPACT ANALYSIS

3.3.1 CULTURAL RESOURCES

This assessment of potential impacts on archaeological and architectural resources was conducted pursuant to Section 106 of the National Historic Preservation Act of 1966 (NHPA) because funds from FTA, a federal agency, are being sought for the Proposed Action.

Areas of potential effect (APEs) were defined to assess the Proposed Action's potential effects on archaeological and architectural resources. The archaeological APE is the area of planned construction and disturbance—the project site itself. Based on potential effects due to on-site construction activities, and also to account for the project's potential visual and/or contextual effects, the architectural resources APE was defined as being within an approximately 400-foot radius of the project site (see **Figure 3-3**). For the architectural resources assessment, a review was undertaken to identify any properties that are National Historic Landmarks (NHLs), listed on the State or National Registers of Historic Places (S/NR) or determined eligible for such listing, and/or listed on the Westchester County Inventory of Historic Places (WCIHP). Additionally, a survey of the study area was undertaken to identify any properties that may meet S/NR or WCIHP eligibility criteria.

3.3.1.1 ARCHAEOLOGICAL RESOURCES

A Phase 1A archaeological investigation (Martin and Brosnan, October 2009) was prepared to evaluate the potential for archaeological resources to exist on the project site. **Appendix B** provides a summary of this report and the maps referenced below. This supplements information presented in a previous Phase 1A archaeological investigation (Martin and Brosnan 2006) that examined the potential archaeological sensitivity of adjacent properties and included an overview of the surrounding vicinity, but did not specifically address the project site at 50 Haarlem Avenue.

As further described in **Appendix B**, the soils of the project site are mapped by the United States Department of Agriculture as Urban land (Uf), signifying that they have been subjected to varying degrees of disturbance and alteration from their natural state. In order to assess the likelihood for potential archaeological resources to exist on the project site, historic maps were consulted as an initial research step. The earliest identified depiction of the project area is from 1867 (Beers). That map reveals the area of North White Plains to have been largely undeveloped at the time, with a single dwelling shown on Route 22 near the project site. The project site and surrounding area remained largely undeveloped through the 19th century (Bien 1893). A Bromley map from 1910 illustrates the same lack of development in the early 20th century.

By 1930, as indicated on a Sanborn fire insurance map, the project site and block had been subdivided and residential, industrial, and institutional development had occurred around the 19th-century dwelling and outbuildings south of the project site on Route 22. That dwelling and two outbuildings survived into the middle of the 20th century but were removed in 1952 for construction of the existing three-story office building at 525 North Broadway, which was expanded to the north in 1984 and is now occupied by Metro-North. The current level of development on the project site and block was present by 1987 (Sanborn 1987). A utility building and associated chimney is located on the project site immediately north of the existing parking garage.

In addition to reviewing historic maps of the project site and area, soil boring profiles were examined from a limited soil investigation on the property. One shows cultural material (brick and wood) near the surface, but its proximity to the boiler house and shed could reflect those features as the source. The remaining seven soil borings noted nothing, though artifact recovery was not an objective. While the borings were small in diameter and not specifically intended to identify potential artifacts, significant archaeological remains could still be expected to have been noticed if they were present.

Based on the review of historic maps, previous Phase 1A archaeological investigations, and soil borings, the Phase 1A concludes that the project site has a low probability of hosting intact archaeological remains. The project site and immediately surrounding area may have once held the potential for prehistoric archaeological remains, but modern development (e.g., the existing parking garage) and alteration of the natural ground surface has decreased any potential for intact deposits. Historic maps do not indicate development on the project site until the second quarter of the 20th century, and development in the 1950s removed the only 19th-century structures that were located on the project block.

The Phase 1A report prepared for the project stated that based on the absence of evidence for structures or other earlier development on the project site and the disturbance associated with late-20th-century growth, it is not expected that the Proposed Action would impact archaeological resources eligible for the National Register of Historic Places and that further analysis, including Phase 1B testing, was not necessary. The New York State Office of Parks, Recreation, and Historic Preservation (OPRHP) was provided with the Phase 1A report, and issued a No Adverse Effect finding in a letter dated March 15, 2010. The OPRHP's letter did not request Phase 1B testing (see **Appendix C**).

3.3.1.2 ARCHITECTURAL RESOURCES

3.3.1.2.1 Project Site

No architectural resources are located on the project site.

3.3.1.2.2 Within the APE

As shown in **Figure 3-3**, the BRPR (S/NR, WCIHP) is the only resource located within the boundaries of the APE. Running for approximately 10 miles between Sprain Brook Road and the Kensico Dam Plaza, the BRPR is significant under National Register Criteria A and C in the areas of conservation, transportation, landscape architecture, architecture, and engineering. The BRPR is approximately 245 feet west of the project site at its closest point; it is located west of the Metro-North Harlem Line and is heavily wooded.

The Proposed Action would construct a five-level parking garage on the project site. The garage would be approximately 50 feet to the top of the upper level parapet and approximately 68 feet to the top of the elevator tower.

There would be limited visibility of the proposed parking garage from within the BRPR due to distance, topography, and intervening vegetation and buildings. Although the upper portions of the garage might be visible from locations along the eastern edge of the BRPR, it would be seen in the background of the two station parking lots on the west side of the tracks, the station and rail line embankment, transmission towers, and dense vegetation within the BRPR. Further, as seen from within the BRPR, the garage would be one of several buildings of comparable height within the APE. Therefore, any limited visibility of the garage from within the BRPR would be a minor impact, as it would not significantly change the visual context of the resource, since the existing parking lots, rail line, and buildings along Haarlem Avenue are currently visible from the same locations from which the proposed garage would be expected to be visible.

In a letter dated March 15, 2010, OPRHP opined with respect to the Project's impacts upon Historic and Cultural Resources and stated that the Project would have "No Effect" (see **Appendix C**).

3.3.1.2.3 Outside the APE

As seen in **Figure 3-3**, the White Plains Rural Cemetery and Office (S/NR, WCIHP) is located outside the project's 400-foot APE. The White Plains Rural Cemetery is approximately 870 feet south of the project site. The Cemetery is bordered by buildings along Holland Avenue on the north, Route 22 on the east, Cemetery Road and I-287 on the south, and the rail line on the west. It is significant under National Register Criterion C as a distinctive and intact example of a mid-19th century rural cemetery. Between the Cemetery and the project site are parking lots and several buildings of two to nine stories.

There would be limited or no visibility of the proposed parking garage from within the White Plains Rural Cemetery due to distance, intervening buildings, and vegetation along the northern edge of the Cemetery. Any limited visibility of the garage from within the Cemetery would be a minor impact, as the garage would only be visible in the background of a nine-story residential building on Holland Avenue, a four-story commercial building on Haarlem Avenue at Glenn Street, and a five-story commercial building on Glenn Street.

3.3.1.3 CONCLUSION

The Proposed Action would have No Effect on historic or cultural resources and therefore, it would not result in significant adverse impacts on such resources.

3.3.2 VISUAL AND AESTHETIC CONDITIONS

The proposed parking garage would be visible from a number of locations in the surrounding area. However, based on the existing urban character and topography of the area, the Proposed Action is not anticipated to result in an aesthetic conditions impact or a drastic change in visual character (see **Figure 3-4**). While views from certain resources may be possible, those views would also include existing buildings and facilities that have a similar character. The parking garage would be taller than the garage that currently occupies the site, but the additional height would not result in a substantial increase in its visibility because of the slope and topography of the area relative to the elevation of the proposed garage. In general, nearby resources such as the BRPR, the Bronx River Pathway, and the Bronx River Parkway itself may have locations where the proposed parking garage would be visible, but these views would be screened by trees and

the existing train station. Furthermore, the views of the garage would be in the context of existing buildings that currently surround the proposed parking garage. The same conditions apply for views from the White Plains Rural Cemetery and the high-rise apartment building west of Route 22. Views from areas east of Route 22 would also not be substantially altered since the proposed parking garage would be obscured by the existing office building located on Route 22. While the proposed garage would be taller than the existing garage on the project site, it would not result in a significant change in aesthetic character and therefore would have no significant adverse impacts on visual and aesthetic conditions.

3.3.3 TRANSPORTATION

3.3.3.1 TRAFFIC

A detailed traffic impact analysis was performed to determine the potential impact of the Proposed Action on the study area roadway network. The analysis involved a comparison of the study area future roadway conditions with the Proposed Action (the Build Scenario) and without completion of the Proposed Action (the No Build Scenario). The Year 2015 was used as the horizon year for analysis, the “build” year, as it will occur shortly after the Proposed Action is open for operations.

Appendix D details the methodology and analysis results of the traffic study, which is also briefly described below.

3.3.3.1.1 Methodology

The methodology for the traffic impact analysis included the following steps:

- Determination of the intersections and peak traffic hours to be analyzed
- Determination of the Existing traffic conditions
- Development of the 2015 No Build Scenario traffic conditions
- Development of the 2015 Build Scenario traffic conditions
- Criteria for assessing the traffic impacts of the Proposed Action (2015 Build Scenario)

The City of White Plains Traffic Commissioner; the Town of North Castle’s Planner and Traffic Engineer; the New York State Department of Transportation (NYSDOT); and the Westchester County Department of Public Works-Traffic Engineering Division; and the New York City Department of Environmental Protection (NYCDEP) (“Traffic Stakeholders”) were consulted during the development of the methodology, each step of the process and in the determination of the proposed mitigation measures.

Each of the steps are discussed in detail in the following sub-sections.

Determination of the Intersections and Peak Traffic Hours to Be Analyzed

Two areas of consideration for the determination of traffic impacts are locations of potential congestion and time of day. In regard to locations of potential traffic congestion, it is standard practice to analyze traffic at intersections since intersection capacity controls the performance of the street network. Traffic conditions at 18 intersections (see **Figure 3-5**) were selected for analysis based on the review of arrival and departure patterns of Metro-North customers who use the North White Plains station and consultation with Westchester County.

MTA Metro-North Railroad North White Plains Parking Garage

In regard to time of day considerations, the street peak hours reflect the busiest periods of the day for local traffic and correspond to, the arrivals to and departures from, workplaces in the areas near the North White Plains station. They occur at:

- 8 AM – 9 AM for the morning street peak hour; and
- 5 PM – 6 PM in the evening street peak hour.

The site peak hours reflect the peak arrival and departure of Metro-North customers at the North White Plains station. They are different than the street peak hours, as Metro-North customers arrive earlier to North White Plains Station and leave later to account for their travel time to their Manhattan jobs, and occur at:

- 7 AM – 8 AM for the morning site peak hour; and
- 6 PM – 7 PM for the evening site peak hour.

Based on discussions with locally elected officials and stakeholders, who were concerned about the traffic added by the new parking facility, it was decided to perform the traffic analysis for both the street and site peak hours to ensure that there was a full understanding of the potential traffic impacts of the Proposed Action.

Determination of the Existing Traffic Conditions

The existing traffic conditions serves as a baseline for all traffic analyses. Existing traffic conditions were developed based on the comparison of traffic counts conducted in the study area in 2003 and 2008. It was found that the 2008 volumes were 12 percent lower during morning and evening site peak hours, an unusual phenomenon as traffic typically grows over time in most urban environments. This finding was corroborated by the City of White Plains and Westchester County Department of Public Works' own traffic surveys which showed similar reductions. It is believed that the lower volumes can be attributed to a number of conditions, including higher gasoline prices experienced in spring 2008, the effects of NYSDOT's I-287 Interchange 6 and Westchester County's Bronx River Parkway median reconstruction projects in 2008 and the economic downturn. Therefore, it was concluded, in consultation with the Traffic Stakeholders, that the lower 2008 volumes would not provide a realistic evaluation of potential impacts from the Proposed Action within traditionally accepted conservative analysis techniques.

Based on an analysis of continuous counts from the City of White Plains traffic signal system, the Traffic Stakeholders agreed that the approach to determining and assessing reasonable existing traffic volumes was to adjust the 2003 volumes at the study area intersections downward by 3 percent and then increase them at 0.5 percent annually from 2003 to 2008. This growth rate is consistent with the County growth rate for the area and was concluded to provide a conservative approach to enable the establishment of baseline 2008 volumes.

Development of the 2015 No Build Scenario Traffic Conditions

The No Build Scenario accounts for future year background traffic growth resulting from area development that would be in place independent of the construction of the Proposed Action. The 2015 No Build Scenario was determined by increasing the adjusted 2008 traffic volumes by 0.5 percent annually. The following roadway improvements that are anticipated to be in place by the year 2015 and were not in place in 2008 were also incorporated:

- Reconstruction of Interchange 6 on I-287
- Road improvements on the Bronx River Parkway which included reconstruction of the Fisher Lane and Virginia Road intersections

- Proposed capacity improvements at the intersection of Route 22 (Broadway) and Sir John’s Plaza
- The proposed removal of curbside parking along northbound Route 22 at its intersection with Reservoir Road and the Central Westchester Parkway

Development of the 2015 Build Scenario Traffic Conditions

To develop the 2015 Build Scenario, project-generated traffic volumes were added to the 2015 No Build traffic network. Project-generated volumes were estimated based on current arrival and departure patterns for the existing garage at 50 Haarlem Avenue and reflect the incremental increase in the size of this facility. The approximately 390-net-new parking spaces on the project site are expected to generate 111, 74, 35, and 124 vehicle trips in the morning site and street peak hours, evening street and site peak hours, respectively. These vehicle trips were assigned to area roadways based on the existing arrival and departure patterns of Metro-North customers at the North White Plains station. It is anticipated that upon opening, the 500 space garage will be not be fully utilized by the end of the morning peak period (10 AM). This would allow off-peak customers to access the railroad for discretionary travel.

Conceptual design for the Proposed Action calls for the garage driveways to be located along Haarlem Avenue approximately 200 feet south of Bond Street. In order to provide convenient access to the garage, Haarlem Avenue would be converted from one-way northbound to a two-way street between the garage driveways and Bond Street. These roadway changes were assumed as part of the 2015 Build Scenario analysis.

Criteria for Assessing the Impacts of the Proposed Action

To determine the potential significant impacts of the Proposed Action, traffic operations in the 2015 Build Scenario were compared to the 2015 No Build Scenario. The basis for this comparison was the performance of each scenario’s traffic movements at an intersection characterized by a measure called Level of Service (LOS). As shown in **Table 3-1**, the LOS is defined by seconds of delay experienced by vehicles approaching an intersection, with classifications ranging from a free flowing A to an F with long delays. Intersection characteristics affecting the LOS are traffic volume, lane configuration and width, permitted vehicle movements, heavy vehicle percentage, and traffic control measures (i.e., signal timing and phasing or stop-sign locations). Typically, LOS A, B, C, or D is considered acceptable with minimal or modest delays for motorists. LOS E and F reflect heavy congestion and/or substantial delays for motorists.

**Table 3-1
Level of Service Threshold Criteria***

LOS	Signalized Intersections (seconds of delay)	Unsignalized Intersections (seconds of delay)
A	0 – 10	0–10
B	>10–20	>10–15
C	>20–35	>15–25
D	>35–55	>25–35
E	>55–80	>35–50
F	>80	>50
Note: * Delay includes initial deceleration delay, queue move-up time, stopped delay and final acceleration delay.		

On the basis of the LOS conditions described above, if the resulting LOS were D or better or if the Proposed Action did not directly cause the LOS for an intersection or an approach to be worse than D, the Proposed Action would be considered to have no significant adverse impacts on traffic operations.

If the intersection, or individual approaches or traffic movements, would operate at LOS E or F in the Build Scenario, then the following criteria were used to determine if the Proposed Action would result in a significant adverse impact on the intersections operations:

- A drop from LOS D or better conditions in the Future No Build Scenario to LOS E or LOS F conditions in the Future Build Scenario; or
- Projected operations remain at LOS E or F in the Future No Build Scenario and a significant increase in delay or v/c in the Future Build Scenario.

For locations where these criteria were met, mitigation measures were proposed for returning operations to the No Build Scenario or better.

3.3.3.1.2 Analysis Results

Based on the traffic impact analysis discussed in detail in **Appendix D**, it was determined that the Proposed Action would not result in significant adverse impacts in the overall operation of any of the 18 study area intersections. However, project-generated traffic would have potential significant impacts on some of the approaches at three (3) intersections, all of which can be mitigated to a LOS that is better than or equal to the No Build scenario. These intersections are:

- Route 22–Fisher Lane/Tompkins Avenue (signalized);
- Route 22–Reservoir Road–Central Westchester Parkway (signalized); and
- Route 22/Broadway–Sir John’s Plaza (signalized).

These intersections are highlighted in **Figure 3-5**.

Suggestions are also provided for improving traffic conditions at the following two intersections but are not required or intended to address any significant impacts:

- Route 22–Bond Street/Otis Avenue; and
- Bronx River Parkway–Fisher Lane–Southbound left-turn lane.

Intersections Requiring Mitigation

The potential significant adverse impacts and the proposed mitigation measures are summarized below and also discussed in detail in **Appendix D**.

1. Route 22–Fisher Lane/Tompkins Avenue

The intersection configurations used for the traffic impact analyses of the Route 22-Fisher Lane/Tompkins Avenue signalized intersection are shown in **Figure 3-6**. The analysis results are summarized in **Table 3-2**.

The overall Route 22-Fisher Lane/Tompkins Avenue intersection in the Build Scenario is anticipated to operate with little change from the No Build Scenario (see **Table 3-2**). However, the Fisher Lane left turn lane and/or approach is anticipated to experience increased delays leading to a drop in Level of Service during certain site and street peak hours from LOS D to LOS E.

Table 3-2

Traffic Impact Level of Service Analysis: Route 22-Fisher Lane/Tompkins Avenue

Intersection Approach	Movement	2008 Existing		2015 No Build		2015 Build		2015 Build with Mitigation	
		Morning	Evening	Morning	Evening	Morning	Evening	Morning	Evening
Street Peak Hours (8AM to 9AM and 5PM to 6PM)									
Route 22 NB		C	B	C	C	C	C	A	B
Route 22 SB		C	B	C	C	C	C	C	C
Fisher Lane EB	L	E	D	E	D	E	D	E	D
	R	D	D	D	D	D	D	D	D
	Overall	D	D	D	D	E	D	D	D
Tompkins Avenue WB		C	C	C	C	C	C	C	C
Overall Intersection		C	B	C	B	C	B	C	B
Site Peak Hours (7AM to 8AM and 6PM to 7PM)									
Route 22 NB		A	B	A	B	A	B	A	A
Route 22 SB		B	B	B	B	B	B	B	B
Fisher Lane EB	L	D	D	D	D	E	E	D	D
	R	D	D	D	D	D	C	D	D
	Overall	D	D	D	D	D	E	D	D
Tompkins Avenue WB		D	D	D	D	C	D	C	D
Overall Intersection		C	B	C	B	C	C	C	B

This impact is caused by vehicles leaving the proposed new garage that must use Fisher Lane to travel to the north since it currently provides the only access to northbound Route 22. Bond Street could provide an alternative egress for garage customers who want to travel north. However the Bond Street intersection is currently unsignalized, and left turns are prohibited.

To mitigate these impacts, a traffic signal with pedestrian crossing controls is proposed at the Route 22–Bond Street/Otis Avenue intersection which would permit left turns from Bond Street onto northbound Route 22. **Figure 3-6** illustrates the location of the proposed Bond Street signal relative to Fisher Lane.

The proposed traffic signal at Bond Street will divert northbound project-generated trips from the Fisher Lane approach at Route 22 to the Bond Street approach at Route 22. As shown in **Table 3-2**, implementation of the proposed improvement would return all Levels of Service at the Route 22-Fisher Lane/Tompkins Avenue intersection to their No Build levels. The proposed traffic signal at Bond Street would mitigate the potential significant adverse impact at Fisher Lane; therefore, there would be no significant adverse impact at this intersection. The addition of the traffic signal would require a recommendation from the City of White Plains Traffic Commission and an approval of an ordinance change from the City’s Common Council.

Introduction of a new traffic signal at Bond Street will result in Level of Service changes at the Route 22-Bond Street/Otis Avenue intersection. **Table 3-3** summarizes these changes. Overall, the intersection would operate at LOS B or better in the Build scenario. Therefore, no significant adverse impact is expected.

It is noted that although an increase in delay (or drop in the LOS) for the Otis Avenue westbound approach is anticipated, the increased delay would impact approximately 10 vehicles in the combined AM site and street peak hours. In comparison, more than 1,000 vehicles at the Route 22-Fisher Lane/Tompkins Avenue intersection would benefit in both AM peak hours from improved Levels of Service. The low vehicular volume exiting the Otis Avenue approach would clear the intersection during the allocated green phase.

Table 3-3

Traffic Impact Level of Service Analysis: Route 22–Bond Street/Otis Avenue Unsignalized Intersection

Intersection Approach	Movement	2008 Existing		2015 No Build		2015 Build		2015 Build with Mitigation	
		Morning	Evening	Morning	Evening	Morning	Evening	Morning	Evening
Street Peak Hours (8AM to 9AM and 5PM to 6PM)									
Route 22 NB	L/Overall Approach	A	A	A	A	A	A	C	A
Route 22 SB	L/Overall Approach	A	A	A	A	A	A	A	A
Bond Street EB	R/Overall Approach*	F	B	F	B	F	B	D*	C*
Otis Ave WB	LR/Overall Approach	A	C	A	C	A	C	D	D
Overall Intersection	Overall							B	A
Site Peak Hours (7AM to 8AM and 6PM to 7PM)									
Route 22 NB	L/Overall Approach	A	A	A	A	A	A	A	A
Route 22 SB	L/Overall Approach	A	A	A	A	A	A	A	A
Bond Street EB	R/Overall Approach*	C	B	C	B	C	B	C*	D*
Otis Ave WB	LR/Overall Approach	C	A	C	A	C	B	D	D
Overall Intersection	Overall							B	B

Note: * In 2015 Build with Mitigation, Left and Right Turns will be permitted.

2. *Route 22–Reservoir Road–Central Westchester Parkway*

The intersection configurations used in the traffic impact analyses of the Route 22–Reservoir Road–Central Westchester Parkway signalized intersection are shown in **Figure 3-7**. The analysis results are shown in **Table 3-4**.

The overall intersection in the Build Scenario is anticipated to operate with little change from the No Build Scenario (see **Table 3-4**). However, during the morning street peak hour, the southbound Route 22 approach would experience a slight increase in delay resulting from a drop in LOS for the shared through/right-turn movement lane from a No Build LOS E to a Build LOS F. In the evening, operations of the northbound Route 22 approach would decline from a No Build LOS E to a Build LOS F during the street peak, and from a No Build LOS D to a Build LOS E in during the site peak.

The following mitigation measures are proposed to address these impacts and improve operations at the northbound and southbound Route 22 approaches:

- Upgrade the existing signal phasing control device (signal box) to a modern, high-performance controller that provides advanced management and greater flexibility in implementing signal time changes throughout the day;
- Increase the signal cycle length from 110 seconds to 120 seconds during morning peak hours, and adjust the signal timing to increase the amount of green signal time provided to the southbound Route 22 approach; and
- Adjust the signal timing during the evening peak hours to increase the amount of green signal time given to the northbound Route 22 approach.

With the implementation of these mitigation measures, all LOS results will return to their No Build levels. Therefore, there would be no significant impact at this intersection.

Table 3-4

Traffic Impact Level of Service Analysis: Route 22–Reservoir Road–Central Westchester Parkway

Intersection Approach	Movement	2008 Existing		2015 No Build		2015 Build		2015 Build with Mitigation	
		Morning	Evening	Morning	Evening	Morning	Evening	Morning	Evening
Street Peak Hours (8AM to 9AM and 5PM to 6PM)									
Route 22 NB	L	E	F	-	-	-	-	-	-
	TR	C	D	-	-	-	-	-	-
	Overall	D	E	D	E	D	F	D	E
Route 22 SB	L	B	C	B	C	B	C	B	C
	TR	E	C	E	C	F	C	E	C
	Overall	E	C	E	C	E	C	E	C
Central Westchester Pkwy NB	T	C	E	C	F	C	F	C	F
	R	B	B	B	B	B	B	B	B
	Overall	C	E	C	F	C	F	C	F
Reservoir Road WB	L	D	E	D	E	D	E	D	E
	R	C	D	C	D	C	D	C	D
	Overall	D	E	D	E	D	E	D	E
Overall Intersection		D	E	E	E	E	E	E	E
Site Peak Hours (7AM to 8AM and 6PM to 7PM)									
Route 22 NB	L	C	F	-	-	-	-	-	-
	TR	D	D	-	-	-	-	-	-
	Overall	D	F	D	D	D	E	D	D
Route 22 SB	L	B	C	B	C	B	C	B	C
	TR	C	C	C	C	C	C	C	C
	Overall	C	C	C	C	C	C	C	C
Central Westchester Pkwy NB	T	C	D	C	D	C	D	C	D
	R	B	B	B	B	B	B	B	B
	Overall	C	D	C	D	C	D	C	D
Reservoir Road WB	L	D	E	D	E	D	E	D	E
	R	C	C	C	C	C	C	C	C
	Overall	C	D	D	D	D	D	D	D
Overall Intersection		C	D	C	D	C	D	C	D

3. Route 22/Broadway–Sir John’s Plaza

The configurations used in the traffic impact analyses of the Route 22/Broadway–Sir John’s Plaza intersection are shown in **Figure 3-8**. The analysis results are shown in **Table 3-5**.

As described earlier, the No Build scenario was developed assuming growth in background traffic to the build year, and implementation of planned improvements to the roadway network. The closing of the road over the Kensico Dam in 2003 created traffic issues mostly to the north of the study area. The one study area intersection impacted by this closure is Route 22/Broadway-Sir John’s Plaza. NYCDEP plans to mitigate impacts of the closure of the road over the Kensico Dam at this intersection by retiming the traffic signal and adding one additional southbound lane on the Broadway approach. These improvements are included in the No Build alternative and effectively improve traffic operations at some approaches in the No Build scenario as compared to the existing condition.

The only LOS changes resulting in a potential significant adverse impact from the Proposed Action occur in the morning site peak hour. During this hour, the overall intersection would experience a decline from a No Build Scenario LOS C to a Build Scenario LOS D, which is not an adverse impact. However, the southbound Route 22 approach would experience a decline from LOS E to LOS F.

Table 3-5

Traffic Impact Level of Service Analysis: Route 22/Broadway-Sir John’s Plaza

Intersection Approach	Movement	2008 Existing		2015 No Build		2015 Build		2015 Build with Mitigation	
		Morning	Evening	Morning	Evening	Morning	Evening	Morning	Evening
Street Peak Hours (8AM to 9AM and 5PM to 6PM)									
Route 22 NB	LT	D	D	B	C	B	C	B	C
	R	A	A	A	A	A	A	A	A
	Overall	C	C	B	C	B	C	B	C
Broadway SB		C	B	B	A	B	A	B	A
Route 22 SB		E	D	F	F	F	F	F	F
Sir John's Plaza Driveway EB	L	E	E	D	F	D	F	D	E
	R	E	D	D	D	D	D	D	D
	Overall	E	E	D	E	D	E	D	E
Overall Intersection		D	C	E	E	E	E	E	E
Site Peak Hours (7AM to 8AM and 6PM to 7PM)									
Route 22NB	LT	B	C	B	C	B	D	B	C
	R	A	A	A	A	A	A	A	A
	Overall	B	C	B	C	B	C	B	C
Broadway SB		C	B	B	A	B	A	B	A
Route 22 SB		C	D	E	F	F	F	E	F
Sir John's Plaza Driveway EB	L	D	E	D	E	D	E	D	E
	R	D	D	C	D	C	D	C	D
	Overall	D	E	C	E	C	E	D	E
Overall Intersection		C	C	C	D	D	D	C	D

The Sir John's Plaza exit driveway would continue to operate at LOS E during the evening peak hours for both the No Build and Build Scenarios. This would be due to the long wait required for a green signal as the majority of the signal’s green time would be allocated to the arterial roadways. The low vehicular volume exiting the Sir John’s driveway would clear the intersection during the allocated green phase.

The following mitigation measure is proposed to address the impact and improve operations at the Route 22/Broadway–Sir John’s Plaza intersection:

- Adjust signal timing during AM and PM site and street peak hours to reduce delays at the southbound Route 22 approach.

With the implementation of this mitigation measure, all LOS results would return to their No Build levels or better. Therefore, there would be no significant adverse impact at this intersection.

Intersections with Recommended Traffic Enhancements

During the traffic analysis, certain improvements were identified which, though not necessary to mitigate a significant impact, could have a general overall positive impact on the future operating environment at two intersections.

1. *Route 22–Bond Street/Otis Avenue*

The following enhancements are suggested for consideration by the City of White Plains:

- Removing up to 10 long-term on-street metered parking spaces along the south side of Bond

Street which are intended for commuter use and due to their location are not used by patrons of local retail. This will further facilitate traffic flow.

- Converting up to 125 feet of Otis Avenue from a two-way street to a one-way street in the westbound direction to prevent the use of Otis Avenue as the beginning of a short cut through the residential neighborhood for traffic from the west side of Route 22 destined to points north along Route 22.

2. *Bronx River Parkway–Fisher Lane*

The following enhancement is suggested for consideration by Westchester County in order to improve operations at the southbound Bronx River Parkway approach:

- Adjust signal timing during morning peak hours to increase the amount of green signal time to the Bronx River Parkway’s southbound left-turn movement.

This signal timing adjustment during morning site peak hour would permit the Bronx River Parkway southbound left-turn movement to operate with the same Build LOS C as in the No Build Scenario with little change in delay. Although the northbound right turns would remain at the Build LOS D level, operating at one LOS level below the No Build LOS C, this change does not constitute a potential significant impact.

3.3.3.1.3 *Conclusion*

The implementation of the described mitigation measures would return all intersection LOS levels to the No Build Scenario condition or better. Therefore, the Proposed Action would have no significant adverse impacts on traffic flow in the study area.

3.3.3.2 *PARKING*

As described in Chapter 1, “Purpose and Need,” the Proposed Action is intended to provide additional parking to meet anticipated ridership growth at the North White Plains station. The Proposed Action would provide a net increase of approximately 390-parking spaces in the area to serve future Metro-North commuters and would also fully replace the existing 109 parking spaces on the project site. The new parking structure would provide a total of approximately 500 parking spaces. The Proposed Action would remove up to eight (8) short-term metered parking spaces on Haarlem Avenue which are not intended for commuter use. Additionally, the removal of up to ten (10) long-term on-street metered parking spaces along the south side of Bond Street is recommended. These spaces are intended for commuter use, and due to their location are not used by patrons of local retail. Therefore, the Proposed Action would not result in significant adverse impacts on parking.

3.3.3.3 *TRANSIT*

The Proposed Action would support transit use by improving access to rail service for Westchester County residents and accommodating the long-term demand for parking at the North White Plains railroad station. As such, the Proposed Action would allow Metro-North to better serve its existing riders and to attract new riders.

The Bee-Line Route 6 is the closest bus route to the North White Plains station. Route 6 travels along Route 22 and stops at both the Fisher Lane and Glenn Street intersections with Route 22, one block east of the North White Plains railroad station. The route, which runs from Yonkers to Pleasantville via White Plains, is more of a regional route rather than a local route. Route 6’s schedule is not developed to coincide with train arrivals and/or departures, and thus, few people

MTA Metro-North Railroad North White Plains Parking Garage

use it to access the North White Plains Station. The Proposed Action would not alter the routing or schedule of Route 6, and its implementation is not expected to alter Route 6's ridership.

Therefore, the Proposed Action would have no significant adverse impact on transit services or use. Rather, it would benefit Metro-North customers and encourage transit use by providing additional parking at the North White Plains Station.

3.3.3.4 BICYCLING

A review of bicycling activity at the North White Plains railroad station indicates that it is minimal. The Bronx River Pathway in the BRPR is the only bicycle facility that exists within the two-mile potential bicycle market radius of the station. Although the pathway connects directly to the Westchester County Parking Area (Lot 1), it does not offer direct connections to nearby residential areas. A secondary bicycle travel route was identified by Westchester County and bicycle advocates along Route 22; however, heavy traffic activity during commuter peak travel periods may be a disincentive to the majority of Metro-North customers.

Many factors outside of Metro-North's and Westchester County's control limit the use of bicycles as an access mode for customers in the study area. Examples include the distance that many customers live from the North White Plains station, the area's terrain, traffic conditions on the roadway network, and lack of connecting bike routes limit bicycle use. Other limiting factors may include weather, age and physical health of customers, comfort level with this mode, perceptions of safety, and auto ownership. The availability of safe, secure, and sheltered bicycle and scooter parking which is planned for the first floor of the proposed parking garage, would facilitate multi-modal access to the North White Plains Station. Therefore, the Proposed Action would not result in significant adverse impacts on bicycling, rather it would encourage the use of bicycles to access the station.

3.3.3.5 PEDESTRIANS

The Proposed Action would increase pedestrian travel between the proposed parking garage and the North White Plains station. The area surrounding the project site has light pedestrian use, and the construction of the proposed parking garage would not notably change pedestrian usage of the project area. No significant adverse impacts to pedestrian conditions would occur as a result of the Proposed Action.

New crosswalks with pedestrian crossing controls would be installed with the new traffic signal at the Route 22-Bond Street/Otis Avenue intersection, which would improve pedestrian convenience and circulation in the vicinity of the North White Plains Station. These measures would improve access to the North White Plains Station for customers from the east side of Route 22.

3.3.3.6 CONCLUSION

Based upon the above discussion, the Proposed Action would have no significant adverse impacts on transportation services.

3.3.4 AIR QUALITY

Based on the regional and local air quality analysis described in **Appendix E** and summarized below, the Proposed Action would not result in a significant adverse impact on air quality. Instead, it will contribute to overall reductions in carbon monoxide (CO) emissions, which would improve air quality.

3.3.4.1 MESOSCALE (REGIONAL) AIR QUALITY ANALYSIS

As part of its application for CMAQ funding, Metro-North estimated total air quality benefits of the Proposed Action for the period 2012 to 2030. Air quality benefits would derive from a reduction in the total number of vehicle miles traveled in the roadway network if transit service becomes more attractive due to the availability of parking. Estimated total air quality benefits of the Proposed Action for the period 2012 to 2030 are a reduction of approximately 121,510 kg of carbon monoxide (CO), 3,665 kg of volatile organic compounds (VOC), 2,365 kg nitrogen oxides (NO_x), and particulate matter (160 kg of PM_{2.5} and 355 kg of PM₁₀) as a result of vehicles removed from the road.

3.3.4.2 MICROSACLE (LOCAL) AIR QUALITY ANALYSIS

An initial screening analysis of air pollutants was conducted to determine if their concentrations would exceed primary and secondary standards established by the Clean Air Act if the Proposed Action was implemented. These air pollutants included CO, lead, NO_x, ozone, sulfur dioxide, and PM. The screening analysis concluded that it was clear that the air quality standards would not be exceeded, except for CO. It was found that a more detailed analysis would be necessary to determine the effect the Proposed Action would have on CO.

Two detailed evaluations were performed—a CO Mobile Source Air Quality Screening Analysis and a Parking Garage Analysis.

3.3.4.2.1 Parking Garage Analysis

The Proposed Action would not involve the addition of any new stationary emission sources. However, the Proposed Action would include a naturally ventilated parking garage; ventilation of air from the garage could potentially result in increases in CO concentrations in the immediate vicinity of the garage. Therefore, a parking garage analysis was conducted to evaluate CO concentrations that may result from the expanded parking garage. The results of the parking garage analysis indicate that the maximum overall predicted future 1-hour and 8-hour CO concentrations, including ambient background levels and on-site traffic, at public access receptor locations would be 3.54 ppm and 2.23 ppm, respectively. These values are the highest predicted concentrations for either of the two time periods analyzed: the AM and PM peak periods. The maximum predicted CO levels are below the applicable National Ambient Air Quality Standard (NAAQS) and, therefore, no significant impacts from the Proposed Action are expected.

3.3.4.2.2 CO Mobile Source Air Quality Screening Analysis

An assessment of the potential air quality effects on carbon monoxide (CO) concentrations that would result from vehicles coming to and departing from the project site was performed following the procedures outlined in the NYSDOT *Environmental Procedures Manual* (EPM), January 2001. The study area corresponds to that of the 18 signalized intersections identified in the traffic analysis for the site and street peak periods. The screening criteria were applied to the traffic analysis results for the 2015 analysis year. The results of the screening analysis show that none of the 18 signalized intersections affected by the Proposed Action would require a detailed microscale air quality analysis. The Proposed Action is identified in the current conforming New York Metropolitan Transportation Council (NYMTC) 2010-2035 Regional Transportation Plan and the NYMTC FFY 11 program which is included in the 2011-2014 State Transportation Improvement Program (STIP). Therefore, no mesoscale or regional emissions analysis is necessary, and a small reduction in regional vehicle miles traveled is expected.

3.3.4.3 CONCLUSION

The Proposed Action would have no significant impacts on air quality and would contribute to overall reductions in CO emissions.

3.3.5 NOISE AND VIBRATION

3.3.5.1 NOISE

Since there are noise sensitive receptors near the project site, a noise assessment was conducted in accordance with methodologies set forth in *Transit Noise and Vibration Impact Assessment* (Federal Transit Administration, May 2006) to examine potential impacts generated by parking garage operations (see **Appendix F**). With the Proposed Action, future traffic volumes on the access roads and in the station parking facilities would increase. Thus, noise levels at receptor locations adjacent to feeder roadways and parking facilities would also be expected to increase.

In order to assess project impacts, six noise receptor sites were selected. These locations were selected based on a consideration of areas where maximum impacts of the Proposed Action may be likely to occur, and on locations where sensitive land uses exist (see **Table 3-6**). At each receptor location, noise measurements were performed to establish existing conditions.

**Table 3-6
Noise Receptor Sites and Locations**

Site	Measurement Location	FTA Land Use Category	Type of Measurement
1	Fisher Lane between Bronx River Parkway and Haarlem Avenue	1—Parkland	AM/PM 20 minute
2	Holland Avenue between Route 22 and Haarlem Avenue	2—Residential	AM/MD/PM/LN 20 minute
3	Route 22 between Archer and McBride Avenues	2—Residential	AM/MD/PM/LN 20 minute
4	Glenn Street between Route 22 and Haarlem Avenue	2—Residential	AM/MD/PM/LN 20 minute
5	Haarlem Avenue between Bond Street and Fisher Lane	2—Residential	AM/MD/PM/LN 20 minute
6	Route 22 between Brookdale Avenue and Glenn Street	2--Residential	AM/MD/PM/LN 20 minute
Notes: Refer to Appendix F, Figure F-2 for the noise measurement locations For definition of land use categories, see Appendix F, Table F-2 . AM = morning peak hour; MD = midday; PM = evening peak hour; LN = late night			

Table 3-7 shows the results of the noise impact assessment analysis performed for the Proposed Action. Based upon existing noise levels, the allowable project-generated noise levels to avoid moderate impacts and/or severe impacts were calculated. Next, future noise levels for the Proposed Action (i.e., the total noise level with the Proposed Action) were calculated using the methodologies previously described. Then, the Proposed Action’s project-generated noise levels were determined by subtracting existing noise levels from total noise levels with the Proposed Action. Finally, the Proposed Action’s project-generated noise levels were compared to the allowable project-generated noise levels to avoid a moderate impact or severe impact, to determine whether a moderate impact or severe impact would be predicted to occur.

**Table 3-7
Noise Impact Evaluation of Proposed Action**

Noise Receptor Site	Land Use Category	Noise Descriptor	Existing Noise Level	Allowable Project-Generated Noise Levels*		Proposed Action Project-Generated Noise Level	Total Noise Level with Proposed Action	Impact Assessment
				Moderate Impact	Severe Impact			
1	1	L _{eq}	69.1	68.7	73.9	55.8	69.3	No Impact
2	2	L _{dn}	59.0	57.3	62.9	45.6	59.2	No Impact
3	2	L _{dn}	74.4	67.8	72.7	61.5	74.6	No Impact
4	2	L _{dn}	60.3	58.0	63.6	48.6	60.6	No Impact
5	2	L _{dn}	71.0	65.0	70.2	61.3	71.4	No Impact
6	2	L _{dn}	75.2	68.6	73.4	65.7	75.7	No Impact

Notes: For definition of land use categories, see Appendix F, Table F-2. Noise levels in dBA.
*Threshold of new noise levels at which a moderate impact or severe impact would occur. Compare to actual project-generated noise levels.

As shown in **Table 3-7**, there would be no significant noise impacts at any of the receptors as a result of the Proposed Action. In general, the dominant source of noise due to the Proposed Action would be the increased traffic coming to and from the parking garage throughout the day. Noise generated by vehicles operating within the garage would not substantially contribute to the predicted noise levels at any of the receptor sites. **Table 3-7** reflects that because traffic noise generated by the garage would be dispersed throughout the area and throughout the day, the maximum increase in noise levels with implementation of the Proposed Action would be 0.5 dBA from existing conditions and 0.4 dBA from the No Build scenario, which would not be perceptible. Furthermore, the Proposed Action would not result in any significant change from the existing condition at any of the receptor sites.

3.3.5.2 VIBRATION

The changes in the Proposed Action would only generate vehicular traffic and not rail traffic. Therefore, there would be no significant vibration impacts as a result of the Proposed Action.

3.3.5.3 CONCLUSION

Overall, the Proposed Action would not result in significant adverse impacts from project-generated noise or vibration.

3.3.6 CONTAMINATED MATERIALS

The potential for hazardous materials on and near the project site was evaluated in an Environmental Site Investigation Findings Report (March 2009) prepared for the project site by Gannett Fleming Engineers & Architects, P.C. (GF Report). A Phase I Environmental Site Assessment (Day ESA) conducted by Day Engineering, P.C. (Day) in October 2007 was used in developing the work scope for the GF Report.

While the Day ESA identified several potential environmental concerns in connection with the project site, including monitoring wells associated with the 2003 closure of an underground storage tank; presence of a transformer utility vault; floor drains, sumps, and elevator pits within the adjacent office building at 525 North Broadway; and suspected asbestos-containing materials (ACMs) and lead-based paint (LBP), GF’s investigation provided sufficient information to eliminate all of these areas from further environmental concern. GF’s Report contains the results of the following additional environmental investigation efforts:

MTA Metro-North Railroad North White Plains Parking Garage

- Collection/analysis of soil samples from the transformer vault, storage shed, and underground storage tank areas for laboratory analysis;
- Collection/analysis of groundwater samples from the monitoring wells;
- Further assessment of the drains, sumps, and elevator pits within the adjacent office building at 525 North Broadway to determine whether petroleum releases had taken place (although the 525 North Broadway building is not located within the project site, because it is upgradient the potential for contaminants to have migrated from 525 North Broadway was considered with respect to the elevator pits, sumps, and drains within that building);
- Geophysical survey to identify discharge location(s) for storm water run-off and waste water; and
- Survey for the presence of ACM and LBP in the utility building and associated chimney which serve the 525 office building and parking garage (on the project site), as well as the utility tunnel.

Soil analysis did not reveal any evidence of contamination in the area of the transformer vault, storage shed, or underground storage tanks. In addition, the GF Report noted that the three underground storage tanks at the site do not present any environmental concern as the 2,000-gallon fuel oil underground storage tank was properly removed in January 2009; the 21,000-gallon tank passed tightness testing in September 2010; and it has been verified that the 10,000-gallon tank was properly closed in place in September 2003. Soil and groundwater analyses did not detect evidence of a release from any of the tanks. All analysis results were submitted to and approved by NYSDEC and the Westchester County Department of Health Office of Environmental Health Risks.

The geophysical investigation confirmed that no improper discharges from the utility building, or the elevator pits, drains, or sumps located within the adjacent office building at 525 North Broadway, are taking place.

While the ACM and LBP survey identified non-friable ACM in the utility tunnel, utility building, and parking garage, and LBP in the utility building, this is to be expected in facilities of this era and, with appropriate procedures in place, the presence of these substances would not present any concern. Specifically, the following procedures will be employed during construction:

- Prior to any building renovation or demolition, existing structures known to contain ACM would be abated by a licensed asbestos abatement contractor in accordance with applicable requirements, and areas with suspect ACM not previously tested would be sampled. Demolition activities with the potential to disturb LBP would be performed in accordance with all applicable regulations.
- If the proposed construction would affect any of the underground storage tanks, the underground storage tanks would be removed in accordance with applicable requirements, including those related to spill reporting and tank registration. Similarly, any unexpectedly encountered tanks would be removed in accordance with applicable requirements.
- All soil excavated as part of any future site development activities would be managed in accordance with applicable regulatory requirements. Soil intended for off-site disposal would be tested in accordance with the requirements of the receiving facility.
- Any required dewatering would be conducted in accordance with all applicable regulatory requirements.

From the analysis performed to date, it is not expected that soils that will be disturbed for the Proposed Action will be contaminated or that the location will require environmental remediation. Recent (July 2010) sampling of soils excavated in connection with the renovation of 525 North Broadway in a location less than 100 feet from the location of the Proposed Action revealed that the soils are not contaminated. Attention would be paid during construction to any evidence of contamination in the disturbed soil, such as unusual odor and/or staining. If such evidence is encountered, work will be halted and the soil will be tested by a laboratory certified in New York State. Only soil meeting the applicable regulatory limits will be backfilled or reused on the site. Any soil not meeting those limits will be transported for off site disposal in accordance with all regulatory requirements. Any sampling, prepping for disposal, preparation of documentation, including, but not limited to manifests, bills of lading and land disposal restriction forms and approval of transporters and disposal sites would be supervised by Metro-North's Environmental Compliance Department, which is located in a building adjacent to the Project Site.

If any underground storage tanks are encountered and removed during construction, they would be properly registered, cleaned, removed and disposed of in accordance with accepted industry standards and the Westchester County Department of Health Office of Environmental Health Risks and NYSDEC requirements. Any associated soil or groundwater contamination would be addressed as required by NYSDEC's Petroleum Spill Program.

As the investigation performed in connection with the GF Report eliminated from concern all of the potential environmental concerns presented in the Day ESA, and as the above measures would be employed during construction, following construction, there would be no further potential for exposure to any remaining subsurface contamination.

With these measures itemized above, no significant adverse impacts related to hazardous materials would be expected with the Proposed Action.

3.3.7 CONSTRUCTION IMPACTS

Construction of the Proposed Action is anticipated to last approximately 18 months. Following initial site clearance and establishment of all sediment and erosion control measures, the project site would be prepared for excavation and construction of the garage foundation. Either drilled shafts or pile-supported spread foundations would be installed to support the garage.

Although final garage design and specific construction methods would not be determined until the project enters the design process, it is most likely that the garage would be constructed of pre-cast concrete elements. Exterior panels, columns, and deck sections would be transported to the site in stages throughout the construction period by flat-bed truck. Once on-site, a crane would be used to remove the garage structure pieces from each flat-bed and position them for erection by construction crews, as necessary. Flat-bed trucks would be staged within the designated construction staging areas and/or timed to arrive at the site on an as-needed basis.

Construction on-site would generally occur during normal work hours (e.g., 7AM to 4PM) to minimize effects on residents and workers. Delivery times would be carefully coordinated with the City of White Plains, and traffic control measures would be implemented to minimize the impact on peak hour traffic, pedestrians, and residents. A construction schedule would be coordinated with local agencies. Truck movements would typically be spread throughout the day on weekdays. Wherever possible, the scheduling of deliveries and other construction activities would take place during off-peak travel hours to avoid causing congestion and to minimize interruptions to daytime traffic movements.

3.3.7.1 WATER QUALITY

Metro-North would implement Best Management Practices including erosion and sediment control measures consistent with the “New York Standards and Specifications for Erosion and Sediment Control,” during construction to control runoff and pollutants from entering the stormwater management system. Implementation of sediment and erosion control measures would avoid any substantial amount of particulate matter from being transported to the storm sewer system and the Bronx River. Therefore, construction of the parking garage would not result in significant temporary adverse impacts on water quality.

3.3.7.2 TRAFFIC AND PARKING

Construction of the Proposed Action would involve temporary traffic impacts resulting from truck deliveries. Construction crews commuting to the job site would also result in minor additional traffic volumes on local roadways during the shoulders of the peak period (6AM to 7AM and 4PM to 5PM) that buffer the typical construction work hours (7AM to 4PM).

During construction, the existing 109 parking spaces on the project site would not be available to Metro-North customers. It is anticipated that displaced customers could use any available capacity at the North White Plains station, as well as the Westchester County Center lot at the White Plains station. Current available capacity at the North White Plains and White Plains stations is recent and a temporary effect related to current economic conditions, which have been responsible for short-term reductions in Metro-North ridership. Metro-North would provide signage and other informational materials to direct customers to available parking areas during construction.

Overall, the construction of the parking garage would not result in significant temporary adverse impacts on traffic and parking.

3.3.7.3 AIR QUALITY

The principal air quality impact associated with construction activities is the possible generation of fugitive dust, which can vary widely in terms of volume and size of particulate matter generated. Fugitive dust is associated with earth moving, such as site grading, filling, and excavation for foundations. Based on geotechnical soil borings at the project site, it is not anticipated that blasting will be required.

A large proportion of the fugitive dust generated by construction activities would be of relatively large particle size, and would be expected to settle to the ground within a short distance. To minimize these problems, erosion and dust control procedures would be followed during construction and would include:

- Minimizing the area of disturbed soil by careful planning of grading operations so that only the areas needed for any particular construction activity are disturbed;
- Minimizing the time span that soil is exposed;
- Spraying water on dusty surfaces; and
- Using drainage diversion methods (silt fences) to minimize soil erosion during site grading.

Mobile source emissions may result from the operation of construction equipment, and from trucks delivering materials and removing debris at the construction site. Localized increases in mobile source emissions would be minimized by using ultra-low-sulfur diesel (ULSD) fuel for

all on-site construction equipment. Delivery trucks and/or other construction equipment engines would not be permitted to remain idling during unloading or at other inactive times.

No significant temporary adverse impacts on air quality are expected to occur as a result of the Proposed Action during construction.

3.3.7.4 NOISE AND VIBRATION

Construction of the Proposed Action would generate noise and vibration from construction equipment, construction vehicles, and delivery vehicles traveling to and from the project site. Noise levels caused by construction activities would vary widely, depending on the phase of construction—demolition, excavations, foundation, construction of the structures, etc.—and the specific task being undertaken. The following description of construction activities and protocols to monitor construction noise is provided consistent with FTA’s *Transit Noise and Vibration Assessment Methodology* (2006) which specifically addresses noise and vibration during construction.

- Construction activities would last approximately 18 months.
- Construction activities would generally take place during normal weekday, daytime hours (i.e., 7 AM to 4 PM). De-connecting and connecting utilities is a time sensitive task. To minimize disruptions, this work may take place over weekends or at night. Street utility work may also need to take place on weekends and at night.
- The geotechnical exploration, demolition, and pile-driving phases of construction would use large equipment that can be noisy. The noisiest equipment that may be employed during these phases of construction would be pile drivers, which may generate between 98 and 101 dBA at receptors 50 feet from the project site. These noisy activities occur during the first three months of construction would be limited to daytime hours to the extent feasible.
- Construction specifications would require the contractor to adhere to applicable local, state, and federal noise emission standards, and to use only equipment with appropriate noise controls.
- Contractors would be required to demonstrate that equipment complies with applicable local, state, and federal noise emissions standards.
- Coordination with the City of White Plains will be maintained, and the City will be advised when the greatest noise generating construction activities are scheduled to occur.
- Any concerns regarding noise would be handled through Metro-North’s Customer Service Center.

While there will be some temporary noise impacts created by the construction activities, all efforts will be made to reduce the intrusive nature of these temporary activities. Therefore, construction of the parking garage would not result in significant adverse noise impacts.

Construction vibration is typically of concern when historic or fragile buildings are located less than 90 feet from the construction activities. As described above under “Cultural Resources,” there are no historic structures or otherwise fragile buildings within 90 feet of the project site. Therefore, the Proposed Action would not result in significant temporary adverse impacts from construction vibration.

3.3.7.5 CONCLUSION

The Proposed Action would have no significant temporary adverse impacts during construction.

3.3.8 ENVIRONMENTAL JUSTICE

Appendix G includes a detailed Environmental Justice Assessment in accordance with the Council on Environmental Quality and U.S. Department of Transportation (USDOT) guidance. Based on U.S. Census data, three of the four block groups in the Environmental Justice study area, defined as ½ mile from the project site, are identified as Environmental Justice communities.

Minority representation of the study area is below the Council on Environmental Quality (CEQ) 50 percent threshold as well as the total minority population of the City of White Plains. The study area also has a lower percentage of low-income residents than the City of White Plains. One block group has a higher percentage of minority residents than the City of White Plains and two have a higher proportion of low-income residents. Therefore, although individual block groups are considered environmental justice communities, the study area as a whole is not considered an environmental justice community.

As discussed in this EA, the Proposed Action would not result in any significant adverse impacts. Therefore, the Proposed Action is not expected to result in any significant adverse effects on minority and low-income populations or any disproportionately high and adverse effects on environmental justice communities.

3.3.9 COMMITMENT OF RESOURCES

In accordance with NEPA and the Council on Environmental Quality's implementing procedures under 40 CFR Part 1502, this EA includes an analysis of the relationship between short-term uses of the environment and the maintenance and enhancement of long-term productivity, and of any irreversible or irretrievable commitments of resources that would occur if the Proposed Action is constructed.

3.3.9.1 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Construction of the Proposed Action would require the irreversible and irretrievable commitment of construction materials such as concrete, steel, wood, and other building materials. Energy in the form of fossil fuels and electricity would be consumed during the construction and operation of the parking garage. None of these materials are in short supply, and their use for the Proposed Action would not have a significant impact on their continued availability for other purposes. In addition to materials, funding and human labor would be required to design, build, and operate the parking garage.

Overall, the resources used to construct and operate the parking garage would be committed to benefit Metro-North customers as well as area workers and residents. The Proposed Action would accommodate Metro-North's projected parking needs while minimizing effects on the surrounding area.

3.3.9.2 RELATIONSHIP BETWEEN SHORT-TERM USES OF THE ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

Short-term effects on the environment typically result from construction impacts. Long-term effects relate to the maintenance and enhancement of long-term productivity, including consistency of a project with local and regional economic, social, planning, and sustainability objectives.

3.3.9.3 *SHORT-TERM USES*

Construction of the Proposed Action would have greater short-term impacts on the environment than the No Action Alternative since the No Action Alternative would not involve any construction. However, the temporary environmental impacts that would result from the proposed construction activities would not be significant, as described in Section 3.3.8, “Construction Impacts.” The Project Sponsor would endeavor to reduce any construction-related environmental effects through the implementation of Best Management Practices.

3.3.9.4 *LONG-TERM PRODUCTIVITY*

The ability of mass transportation to serve major residential and employment centers is an essential component in economic growth and productivity in cities, as well as a key factor in improving the livability of surrounding neighborhoods. The Proposed Action would provide much-needed parking for Metro-North customers. The Proposed Action would be a component of the long-term enhancement of the transit system and would help to promote the region’s economic vitality by improving access to Metro-North.

3.3.9.5 *SHORT-TERM USES VERSUS LONG-TERM PRODUCTIVITY*

Based on the information presented above, the localized short-term impacts that would result from construction of the Proposed Action would not be significant, and would facilitate the maintenance and enhancement of long-term productivity in the region through the provision of much-needed parking for Metro-North.

3.4 CUMULATIVE IMPACTS

The analysis of cumulative impacts considers resources, eco-systems, and human communities that could be potentially affected by the Proposed Action and whether those could also be affected cumulatively by the Proposed Action in combination with other reasonably foreseeable projects. Cumulative impacts result from the incremental consequences of an action (e.g., the proposed parking garage) when added to other past and reasonably foreseeable future actions (40 CFR 1508.8).

The project area is fully developed with residential, office, and retail uses, and the Proposed Action would not be anticipated to increase development in the surrounding area. Any potential impacts associated with the Proposed Action are expected to be localized as indicated in Chapter 3, “Environmental Analysis.” In addition, there are no other proposed development projects in the vicinity of the project site that would result in cumulative impacts.

The analysis presented in this EA incorporates planned traffic improvements in the area by NYSDOT and the New York City Department of Environmental Protection (NYCDEP) (see Section 2.2.2 and **Appendix D**). These improvements include:

- The Interstate 287 reconstruction;
- The recent Bronx River Parkway median improvements by Westchester County;
- The proposed improvements at the intersection of Route 22/Broadway and Sir John’s Plaza; and
- The proposed removal of parking at the intersection of Route 22, Reservoir Road, and Central Westchester Parkway.

The impact analysis accounts for the cumulative effect of these improvements with vehicle trips generated by the Proposed Action, and concludes that there would be no significant impacts.

MTA Metro-North Railroad North White Plains Parking Garage

Therefore, overall, no significant adverse cumulative impacts are expected as a result of the Proposed Action.

3.5 CONCLUSION

This EA examines the potential impacts of the Proposed Action in accordance with NEPA. The Proposed Action would not result in any significant adverse impact to the environmental categories that were analyzed, and in those instances where a minor impact is recorded, mitigation measures are proposed to alleviate the effects of the Proposed Action. The Proposed Action would also provide for environmental benefits from enhanced access to transit and regional air quality through a reduction in vehicle miles traveled. The anticipated environmental impacts and proposed mitigation actions are shown in **Table 3-8**.

In addition to the approval of funds by FTA, implementation of the Proposed Action would require permits and approvals for the City of White Plains and the State of New York.

Table 3-8
Summary of Environmental Analysis and Mitigation Measures

Area of Evaluation	Potential Impact	Proposed Mitigation
Land Use and Social Conditions		
Land Use and Zoning	None	Not applicable
Displacement and Relocation	Relocation of Nextel antenna and equipment shed	Relocation in consultation with Nextel
Economic Impacts	None	Not applicable
Community Impacts	None	Not applicable
Parkland and Open Space	None	Not applicable
Infrastructure, Utilities and Energy		
Electricity and Gas Service	None	Not applicable
Water and Sewer Service	None	Not applicable
Stormwater Management	None	Not applicable
Geology, Soils, and Topography	None	Not applicable
Natural Resources		
Terrestrial Resources	None	Not applicable
Floodplains	None	Not applicable
Navigable Waterways and Coastal Zone	None	Not applicable
Wetlands and Ecologically Sensitive Areas	None	Not applicable
Water Quality	None	Not applicable
Threatened and Endangered Species	None	Not applicable
Safety and Security	None	Not applicable
Cultural Resources		
Archaeological Resources	None	Not applicable
Architectural Resources	None	Not applicable
Visual and Aesthetic Conditions	None	Not applicable

Table 3-8 (cont'd)

Summary of Environmental Analysis and Mitigation Measures

Area of Evaluation	Potential Impact	Proposed Mitigation
Transportation		
Traffic	<p>Project-generated traffic would have potential impacts on approaches at 3 intersections, all of which can be mitigated. These intersections are:</p> <ul style="list-style-type: none"> Route 22-Fisher Lane/Tompkins Avenue: Eastbound Fisher Lane approach in the AM street peak hour, left turn movement in the AM site peak hour, left turn movement and approach in the PM site peak hour (all LOS E) Route 22-Reservoir Road–Central Westchester Parkway: Southbound Route 22, shared through-right turn in the AM street peak hour (LOS F); Northbound Route 22 approach in the PM street peak (LOS F) and site peak (LOS E) hours Route 22/Broadway-Sir John's Plaza: Southbound Route 22 approach in the AM site peak hour (LOS F) 	<p>Route 22-Fisher Lane/Tompkins Avenue: Install New Traffic Signal at the Route 22-Bond Street/Otis Avenue intersection</p> <p>Route 22-Reservoir Road–Central Westchester Parkway: Install modern signal controller and re-time Traffic Signal at Route 22-Reservoir Road-Central Westchester Parkway intersection</p> <p>Route 22/Broadway-Sir John's Plaza: Re-time Traffic Signal at Route 22/Broadway-Sir John's Plaza intersection.</p>
Parking	Net increase of approximately 390 parking spaces for Metro-North customers and removal of 8 short-term, metered spaces	Not applicable
Transit	Improved access to Metro-North service at North White Plains with improved station parking opportunities	Not applicable
Bicycling	Safe and secure bicycle and scooter parking within the garage would facilitate multi-modal access to the North White Plains Station.	Not applicable
Pedestrians	New crosswalks at Route 22-Bond Street/Otis Avenue would improve pedestrian circulation in the vicinity of the North White Plains Station	Not applicable
Air Quality	Regional benefits from a reduction in CO, VOC, NO _x , PM _{2.5} , and PM ₁₀	Not applicable
Noise and Vibration	None	Not applicable
Contaminated Materials	Asbestos containing material (ACM) and lead based paint (LBP)	Removal and remediation of ACM and LBP prior to construction under protocols complying with all applicable environmental and occupational regulations. Construction health and safety plan.
Construction Impacts		
Water Quality	Temporary stormwater runoff during construction on the project site	Best Management Practices, including erosion and sediment control measures
Parking	Temporary loss of 109 parking spaces	Use of currently available capacity at the White Plains and North White Plains Metro-North Stations
Air Quality	Temporary release of fugitive dust	Minimize areas of exposed soils and spray exposed soils as necessary to reduce fugitive dust
Noise	Temporary construction noise	Limit work to daytime hours (7AM to 4PM) to the extent feasible; require contractor to comply with applicable noise emission standards and to use only equipment with appropriate noise controls.
Environmental Justice	None	Not applicable
Irreversible and Irretrievable Commitment of Resources	None	Not applicable
Cumulative Impacts	None	Not applicable

