# 12. Transportation

## 12.1 INTRODUCTION

This chapter identifies the transportation benefits and potential adverse impacts of the Proposed Project on traffic, parking, transit, intercity passenger rail, and pedestrian travel modes and provides the following:

- Methodological approach for the transportation analyses, including any applicable regulatory and/or technical guidance
- Secondary data sources used and the primary data collection program conducted
- The defined study areas
- Existing transportation (2018) conditions
- Projected No Action Alternative conditions for the future analysis year (2025)
- Future conditions with the Proposed Project and any potential project-related impacts
- Suggested measures to mitigate any adverse impacts.

## 12.2 KEY CONCLUSIONS

Key conclusions from this analysis include the following:

- **Traffic –** Of the 78 traffic analyses conducted (39 intersections in two time periods), new vehicle trips associated with the Proposed Project would result in an adverse impact in two instances. At Morris Park Avenue and Eastchester Road in the AM peak period and at Eighth Avenue and West 33rd Street in the PM peak period, the Proposed Project would result in an increase of greater than 10 seconds of delay as compared to the No Action Alternative. However, the increase in delay at this location would be more than offset by the reduction in delay as a result of the loss in vehicle trips associated with the East Side Access (ESA) project.[1] At all other locations analyzed, the small increase in traffic due to the Proposed Project would not result in any adverse traffic impacts in either the proposed station areas or intersections in the vicinity of Penn Station New York (PSNY).
- **Parking**
  - Consistent with Metro-North policy for urban stations, the Proposed Project would not include new parking spaces.
  - In the PSNY area, the Metropolitan Transportation Authority (MTA) expects no parking impacts. Vehicle trips would continue to be principally by taxi and for-hire vehicles.

[1] Note that to provide a reasonably conservative framework for the impact analysis, MTA took no vehicle traffic-reduction credit in the PSNY study area for the ESA project, which would arguably reduce drop-offs and taxi trips.

  - The existing parking spaces would be sufficient to accommodate the small increase in parking demand in the vicinity of the proposed Bronx stations and the small decrease in parking spaces from constructing the Van Nest AC Substation within an existing surface parking lot.
  - MTA does not expect increased ridership to result in significant parking shortfalls at stations north of the Bronx. Local municipalities would address any increased parking demand through additional parking structures or by encouraging alternative modes of transportation to the stations.

- **Transit**
  - A portion of Proposed Project riders would transfer to the Seventh and Eighth Avenue subway lines as well as the bus routes serving PSNY. However, the Metro-North ridership increase to transit services would be less than the reduction of transit riders associated with the ESA project. The net effect would result in no adverse impacts to transit services.
  - At the proposed Bronx stations, existing services would adequately accommodate increases in bus and subway trips within the vicinity of the stations because neither are at capacity.
  - Metro-North transferring ridership is forecast to decrease on the Lexington Avenue (Nos. 4, 5 and 6 trains) and Flushing (No. 7 train) subway lines and buses serving Grand Central Terminal (GCT) as some Metro-North passengers divert to PSNY-bound service.
- **Rail Operations**
  - New Havel Line (NHL) service to Manhattan would increase by up to 12 trains in the peak periods.
  - Based on findings of the operations simulations, the Proposed Project would not result in any adverse impacts to operations of intercity passenger rail along the Hell Gate Line (HGL), NHL, or at PSNY.
  - The additional track flexibility would improve overall commuter and intercity passenger rail operations for the area.
- **Pedestrians**
  - The Proposed Project would largely not affect PSNY pedestrian circulation spaces due to the passenger volume reduction associated with the ESA project. Further, the pedestrian conditions surrounding the proposed Bronx stations would not be affected, since the additional pedestrian trips to/from the proposed stations would be dispersed over multiple blocks at each location. This would not result in any deterioration of pedestrian conditions that could constitute an adverse impact.

## 12.3 METHODOLOGY

The transportation analyses evaluated existing (2018) conditions, projected future No Action Alternative (2025) conditions, and identified any potential impacts with the Proposed Project in 2025 for both traffic and rail operations.

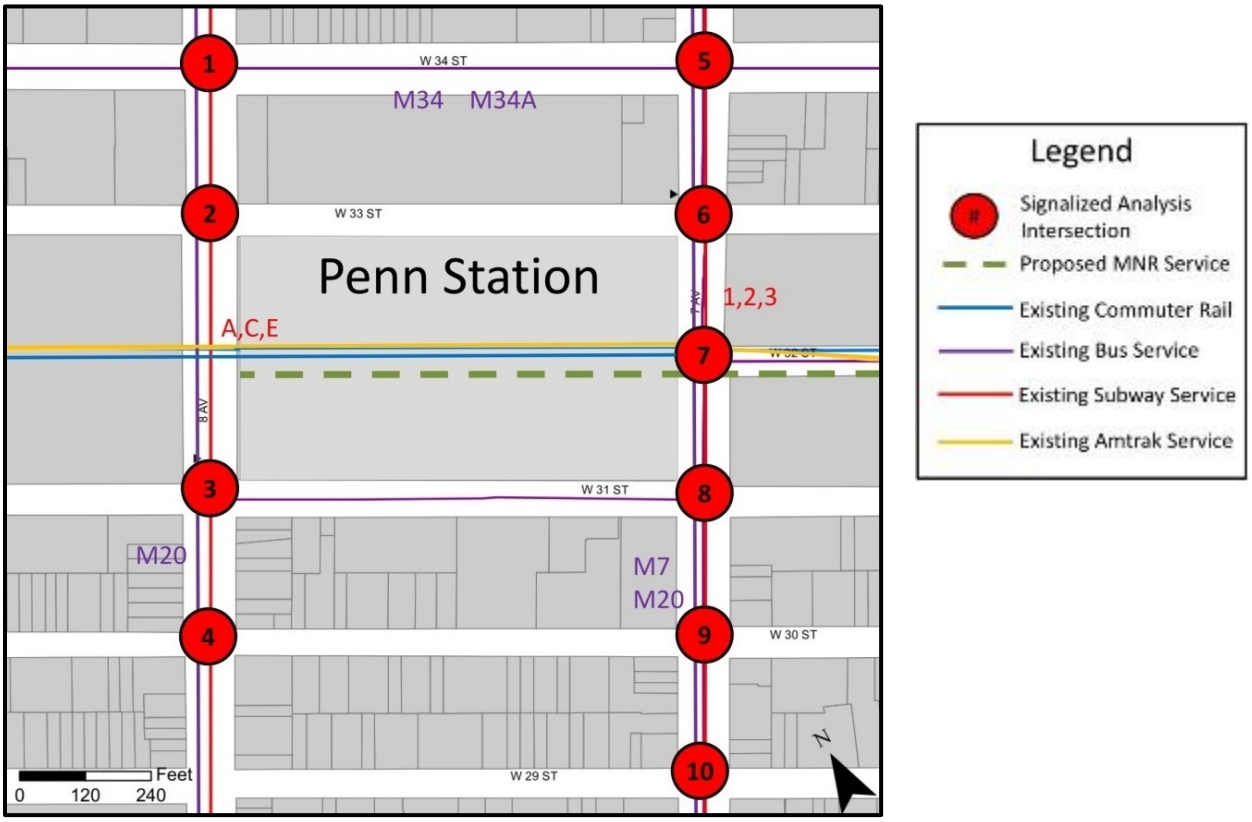
MTA defined the transportation study areas for PSNY and for each proposed new Metro-North station based on the geographic extent of the potential for traffic, transit, parking, and pedestrian impacts in the vicinity of each station. While the Proposed Project service would operate within Queens and southeastern Westchester County (delineated as Segments 1, 2, 3, and 4), no stations are within two of those segments (Segment 1 and

Segment 4) and there would be no localized transportation impacts. MTA omitted these segments from this analysis.

For PSNY, an additional factor in analysis was the projected reduction in commuter-rail passenger volume at PSNY with initiation of the ESA service. Pedestrian circulation paths within the PSNY and access to/from the external sidewalk and street network at PSNY were also identified for the analysis of potential pedestrian impacts.

Figure 12-1 and Figure 12-2 identify the five station-specific transportation study areas and the key traffic intersections and transit services analyzed. The PSNY study area encompasses the surrounding high-volume intersections on Seventh and Eighth Avenues in Manhattan. Study areas at the four new station locations in the eastern Bronx were defined to encompass both signalized and unsignalized intersections that are anticipated to be affected due to passenger drop-off/pick-up activity at the proposed Metro-North stations.

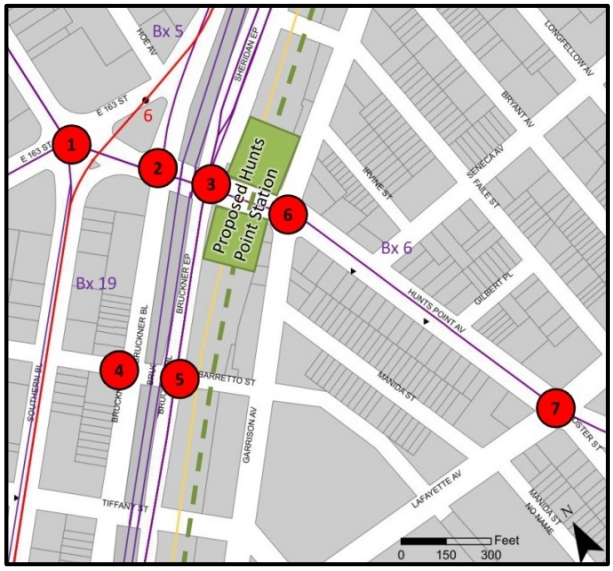
**Figure 12-1. Penn Station New York: Transportation Study Area**



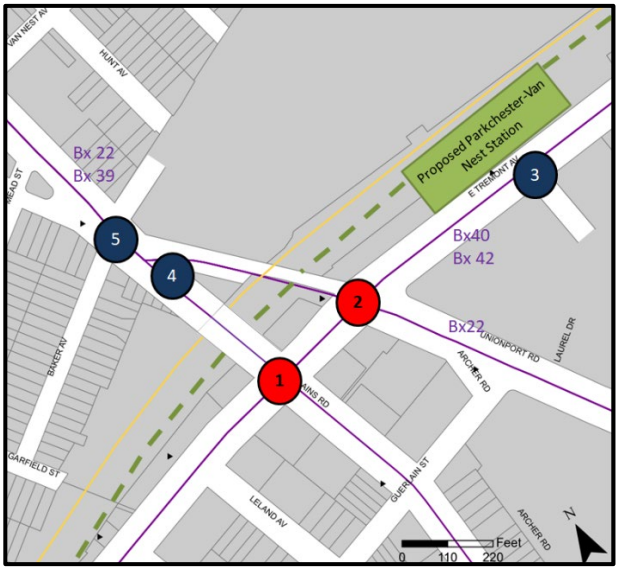

Source: WSP, 2018

## Figure 12-2. Proposed Bronx Stations: Transportation Study Areas

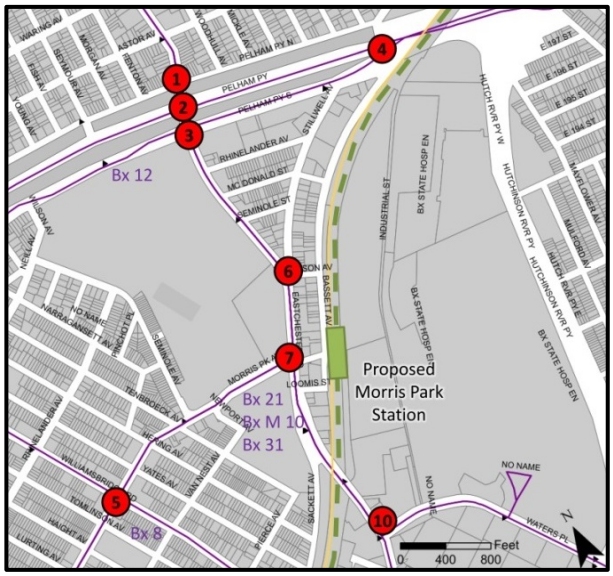
**Hunts Point Station Area**



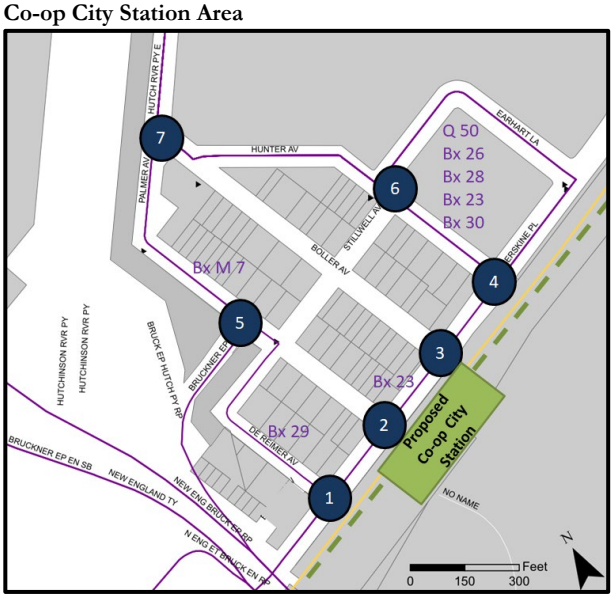

**Parkchester-Van Nest Station Area**

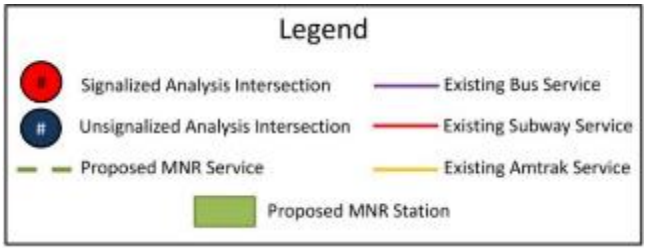



**Morris Park Station Area**




**Co-op City Station Area**




Source: WSP, 2018

As shown in Table 12-1, MTA analyzed 39 intersections for traffic.

**Table 12-1. Number of Intersections Analyzed by Station Area**

| Station Study Area | Number of Intersections Analyzed |
|---|---|
| PSNY Study Area | 10 |
| Hunts Point Station Area | 7 |
| Parkchester-Van Nest Station Area | 5 |
| Morris Park Station Area | 10 |
| Co-op City Station Area | 7 |
| **Total Intersections** | **39** |

Source: WSP, 2018

MTA defined the study areas for analysis of potential impacts on pedestrian circulation to include key circulation corridors, stairs, and escalators within PSNY and to include selected sidewalks and one crosswalk in the vicinity of the four proposed stations in the Bronx.

### 12.3.1 Rail Operations

The rail operations analyses focused on evaluating the train performance on both the NHL and the HGL. In addition, the operations analysis and simulations modeled the territory extending westward from the existing Gate Interlocking (on the HGL) via Harold Interlocking and the East River Tunnels to and including PSNY (addressed in the discussion of PSNY operations). Operations simulations for the year 2025 modelled planned operations for all operators within the study area for both deterministic and perturbed conditions. Delay is represented as "delay per 100 train-miles," which is the number of minutes' difference between a train's ideal running time and its simulated running time prorated by 100 miles. For instance, if a train traveled 50 miles and took two minutes longer in simulation than it would require without any signal interference from other traffic in the form of downgraded signal aspects to which the train's engineer must react, then it will have accrued 4 minutes of delay per 100 train-miles. A train may accrue delay due to signal downgrade and does not necessarily have to be stopped. This is a useful comparative metric because it is immune to the effects of schedule recovery time. A train incurring "delay" in the network may still arrive or depart on time.

Appendix A, "Penn Station Access Future Build – Option J1 Network Simulation Report" provides the full modeling methodology. Earlier analyses for PSNY established the baseline for the service to be provided at the station.

### 12.3.2 Traffic

The traffic analyses considered project-generated increases in taxi trips, transfers to subway and local bus services, and walking trips at PSNY and each of the four new community-based stations proposed in the eastern Bronx. MTA expects private-auto, drive-alone trips to be minimal, given the stations' urban settings and limited station-area parking. Consistent with Metro-North's policy of not providing parking for its stations within New York City, no additional parking has been programmed as part of the Proposed Project.

MTA performed the existing, No Action Alternative, and Proposed Project traffic analyses conditions using *Highway Capacity Manual* output of a Synchro 9 traffic model[2] in each of the five traffic study areas and the

[2] *Highway Capacity Manual 2000*. Washington, D.C.: Transportation Research Board, National Research Council, 2000. Synchro 9 *Highway Capacity Manual* output is approved for use by the New York State Department of Transportation for traffic analyses in the state of New York.

ridership forecasts derived from the Penn Station Access (PSA) Study's Regional Transit Forecasting Model (RTFM) (see Chapter 2, "Project Alternatives").

Table 12-2 shows the level-of-service (LOS)/delay relationship for signalized and unsignalized intersections using the *Highway Capacity Manual* methodology. Levels of service A, B, and C generally represent highly favorable to fair levels of traffic flow. At LOS D, the influence of congestion becomes noticeable. LOS E is the limit of acceptable delay, and LOS F is considered unacceptable to most drivers. In these traffic impact analyses, a signalized lane grouping operating at LOS E or F or a volume to capacity (v/c) ratio of 0.90 or more is identified as congested. For unsignalized intersections, a movement with LOS E or F is also identified as congested.

**Table 12-2. Intersection Level-of-Service Criteria**

| Level-of-Service | Description | Average Delay per Vehicle (seconds) | |
|---|---|---|---|
| | | Signalized Intersections | Unsignalized Intersections |
| A | Satisfactory – Little/No Delay | less than 10.1 | less than 10.1 |
| B | Satisfactory – Minor Delay | 10.1 to 20.0 | 10.1 to 15.0 |
| C | Satisfactory – Some Delay | 20.1 to 35.0 | 15.1 to 25.0 |
| D | Borderline Congestion | 35.1 to 55.0 | 25.1 to 35.0 |
| E | Marginally Acceptable Congestion | 55.1 to 80.0 | 35.1 to 50.0 |
| F | Unsatisfactory – Highly Congested | greater than 80.0 | greater than 50.0 |

Source: *Highway Capacity Manual 2000*, Washington, D.C. Transportation Research Board, National Research Council, 2000.

#### 12.3.2.1 *Criteria for Determination of Impact Significance*

The criteria used to determine the significance of potential traffic impacts at signalized and unsignalized intersections are based on the calculated LOS and increase in delay due to the effects of vehicular traffic generated by the Proposed Project in the PSNY and Bronx stations' vicinities. Based on review of traffic impact criteria used in the evaluations of transit projects in the City of New York's *City Environmental Quality Review (CEQR) Technical Manual*, MTA used the following criteria to identify any significant traffic impacts:

- For locations operating at LOS D or better in the No Action Alternative, an increase in delay with the Proposed Project was not considered adverse if the resulting LOS was D or better.
- For locations operating at LOS E or F in the No Action Alternative, an increase in average intersection delay of 10 seconds or more with the Proposed Project was considered adverse.

#### 12.3.2.2 *Traffic Volumes*

**EXISTING CONDITIONS**

MTA developed a comprehensive data collection plan, based on the identified analysis locations and review of available data from other sources by performing the following :

1. Collected traffic data using automatic traffic recorders and manual turning-movement counts in each of the five study areas during the 7:00 a.m. to 10:00 a.m. and 4:00 p.m. to 7:00 p.m. peak periods.
2. Used the collected automatic traffic recorders and turning-movement volumes to define the critical peak hour for each analysis period for each of the five study areas.
3. Used the automatic traffic recorders traffic volumes and adjacent critical intersection volumes collected to balance the traffic-volume network within the study areas during each peak hour.

4. Determined the peak hour within each peak period by summing the cumulative total of the four highest consecutive 15-minute interval volumes for all key intersections.

Section 12.4, "Existing Conditions" provides the balanced traffic volumes for each of the five study areas.

**NO ACTION ALTERNATIVE**

For the No Action Alternative, MTA performed the following:

- Compiled an inventory of future development projects for the five study areas and incorporated those that are programmed and committed in the No Action Alternative and Proposed Project analyses (see Chapter 3, "Land Use, Zoning and Public Policy").
- Estimated vehicle trips generated by major development projects within the study areas based on relevant published environmental reviews or assessments.
- Determined No Action Alternative (2025) traffic volumes by applying a standard *CEQR Technical Manual* background growth factor of 1.51 percent to the highest AM and PM peak-hour traffic volumes and adding vehicular trips generated by programmed and committed development projects anticipated to be completed by 2025. MTA assumed a 0.25 percent annual growth rate for the first five years, through 2023, and then 0.125 percent annual growth rate was through 2025 (following *CEQR Technical Manual* methodology).

In order to provide a reasonably conservative framework for the impact analysis, MTA took no vehicle traffic-reduction credit in the PSNY study area for the ESA project (arguably reductions in drop-offs and taxi trips).

**PROPOSED PROJECT**

*Trip Generation*

MTA determined the Proposed Project's incremental traffic volumes based on projected ridership and the estimated auto- and taxi-mode shares during the peak hours defined for each of the five stations' study areas. MTA used the RTFM to forecast ridership at the new stations as well as changes on the subway lines connecting to the Proposed Project service. Table 12-3 provides the ridership forecast for each of the five stations during the AM peak period and peak hour. Appendix B, "Ridership Report" provides a copy of the RTFM output used in the analyses, including subway transfer trips for PSNY and GCT.

The RTFM used a 4-hour AM peak period, so MTA applied 0.435 and 0.43 peak-hour factors to inbound and outbound trips, respectively, to estimate the number of AM peak-hour trips with the Proposed Project service.[3] On that basis, the Proposed Project would generate about 2,630 trips to PSNY, about 140 trips to the Hunts Point Station, about 70 trips to the Parkchester-Van Nest Station, about 230 trips to the Morris Park Station, and about 50 trips to the Co-op City Station during the AM peak hour. It was assumed that the PM peak hour would have similar net increments as the AM peak hour but in the reverse direction.

MTA used the RTFM results (Table 12-3 and Table 12-4) and data from previous studies to estimate the Proposed Project's net increase in vehicle trips, parking demand, transit trips, and pedestrian trips.

[3] MTA derived the peak-hour factors from the RTFM forecast results.

**Table 12-3. Penn Station New York and Proposed Bronx Stations' Study Areas: Ridership Forecasts – Passenger Ons and Offs (AM Peak Period)**

| Station | Inbound Volumes | | | Outbound Volumes | | | TOTAL | | |
|---|---|---|---|---|---|---|---|---|---|
| | Ons | Offs | Total | Ons | Offs | Total | Ons | Offs | Total |
| PSNY | 0 | 6,040 | 6,040 | 810 | 0 | 810 | 810 | 6,040 | 6,850 |
| Hunts Point | 10 | 330 | 340 | 710 | <10 | 720 | 720 | 340 | 1,060 |
| Parkchester-Van Nest | 210 | 160 | 370 | 840 | 20 | 860 | 1,050 | 180 | 1,230 |
| Morris Park | 140 | 530 | 670 | 610 | 150 | 770 | 750 | 680 | 1,430 |
| Co-op City | 580 | 120 | 700 | 500 | 40 | 540 | 1,080 | 160 | 1,250 |
| **TOTAL** | **940** | **7,180** | **8,120** | **3,470** | **210** | **3,680** | **4,410** | **7,400** | **11,820** |

Source: AECOM, 2020

**Table 12-4. Penn Station New York and Proposed Bronx Stations' Study Areas: Ridership Forecasts – Passenger Ons and Offs (AM Peak Hour)**

| Station | Inbound Volumes | | | Outbound Volumes | | | TOTAL | | |
|---|---|---|---|---|---|---|---|---|---|
| | Ons | Offs | Total | Ons | Offs | Total | Ons | Offs | Total |
| PSNY | 0 | 2,630 | 2,630 | 350 | 0 | 350 | 350 | 2,630 | 2,980 |
| Hunts Point | 0 | 140 | 140 | 310 | 0 | 310 | 310 | 140 | 450 |
| Parkchester-Van Nest | 90 | 70 | 160 | 360 | 10 | 370 | 450 | 80 | 530 |
| Morris Park | 60 | 230 | 290 | 260 | 70 | 330 | 320 | 300 | 620 |
| Co-op City | 260 | 50 | 310 | 220 | 20 | 240 | 480 | 70 | 550 |
| **TOTAL** | **410** | **3,120** | **3,530** | **1,500** | **100** | **1,600** | **1,910** | **3,220** | **5,130** |

Source: AECOM, 2020

MTA estimated mode shares for access to each of the proposed Bronx stations based on review of Metro-North's 2016 Origin-Destination Survey from which statistics regarding station access modes in the Bronx were derived. MTA considered the following in developing the station-specific mode-share factors:

- The lack of parking availability at the proposed station locations
- The degree to which subway and bus services are available and accessible within reasonable walking distance of the proposed station sites
- The stations' surrounding population densities and income levels in developing the station-specific mode-share factors

Because of the predominantly residential nature of the areas surrounding the proposed Co-op City and Parkchester-Van Nest Stations, MTA assumed that most trips to and from these stations would be home-based. At the Morris Park Station, MTA assumed that 25 and 75 percent of trips would be home-based and work-based, respectively, due to the concentration of hospitals and other work-trip attractors that would be served by the new station. At Hunts Point Station, MTA assumed that 15 percent of trips would transfer to the subway (IRT No. 6 Subway Line) with the southeastern Bronx and upper Manhattan as an ultimate destination (35 percent of trips were estimated to be locally home-based and 50 percent of trips work-based.

Table 12-5 summarizes the mode-split factors and projected incremental trips for passengers arriving at the station to board the Metro-North PSA service (ons) and disembarking from the train and leaving the station (offs) at each of the five stations.

Because of the predominantly residential nature of the areas surrounding the proposed Co-op City and Parkchester-Van Nest Stations, MTA assumed that most trips to and from these stations would be home-based. At the Morris Park Station, MTA assumed that 25 and 75 percent of trips would be home-based and work-based, respectively, due to the concentration of hospitals and other work-trip attractors that would be served by the new station. At Hunts Point Station, MTA assumed that 15 percent of trips would transfer to the subway (IRT No. 6 Subway Line) with the southeastern Bronx and upper Manhattan as an ultimate destination (35 percent of trips were estimated to be locally home-based and 50 percent of trips work-based.

**Table 12-5. Penn Station New York and Proposed Bronx Stations' Study Areas: Incremental Trips by Mode by Direction (AM Peak Hour)**

| Station | Auto | Drop-off/ Pick-up | Taxi | Subway | Bus | Walk Only | Total |
|---|---|---|---|---|---|---|---|
| **Modal Split – Ons** | | | | | | | |
| PSNY[1] | 0% | 0% | 2% | 48% | 13% | 37% | 100% |
| Hunts Point[2] | 1% | 1% | 8% | 15% | 45% | 30% | 100% |
| Parkchester-Van Nest[2] | 2% | 3% | 5% | 0% | 40% | 50% | 100% |
| Morris Park[2] | 2% | 3% | 5% | 0% | 65% | 25% | 100% |
| Co-op City[2] | 4% | 6% | 8% | 0% | 45% | 37% | 100% |
| **Modal Split –Offs** | | | | | | | |
| PSNY[1] | 0% | 0% | 2% | 37% | 10% | 51% | 100% |
| Hunts Point[2] | 0% | 4% | 10% | 15% | 50% | 21% | 100% |
| Parkchester-Van Nest[2] | 2% | 3% | 5% | 0% | 40% | 50% | 100% |
| Morris Park[2] | 0% | 2% | 8% | 0% | 25% | 65% | 100% |
| Co-op City[2] | 4% | 6% | 8% | 0% | 45% | 37% | 100% |
| **Incremental Trips by Mode – Ons** | | | | | | | |
| PSNY | 0 | 0 | 5 | 170 | 45 | 130 | 350 |
| Hunts Point | 5 | 5 | 20 | 50 | 140 | 90 | 310 |
| Parkchester-Van Nest | 10 | 15 | 20 | 0 | 180 | 225 | 450 |
| Morris Park | 5 | 10 | 15 | 0 | 210 | 80 | 320 |
| Co-op City | 20 | 30 | 40 | 0 | 215 | 175 | 480 |
| **TOTAL** | **40** | **60** | **100** | **220** | **790** | **700** | **1,910** |
| **Incremental Trips by Mode - Offs** | | | | | | | |
| PSNY | 0 | 0 | 55 | 975 | 260 | 1,340 | 2,630 |
| Hunts Point | 0 | 10 | 10 | 20 | 70 | 30 | 140 |
| Parkchester-Van Nest | 0 | 5 | 5 | 0 | 30 | 40 | 80 |
| Morris Park | 0 | 5 | 25 | 0 | 75 | 195 | 300 |
| Co-op City | 0 | 5 | 10 | 0 | 30 | 25 | 70 |
| **TOTAL** | **0** | **25** | **105** | **995** | **465** | **1,630** | **3,220** |

Sources:
1. AECOM, 2018; *Moynihan Station Final Environmental Impact Statement*, 2006, Table 4.
2. Origin-Destination Survey, Metro-North Railroad, 2016
   WSP, 2020.

MTA estimated subway-access mode share at PSNY by examining the RTFM-projected subway transfer trips at PSNY. Table 12-6 and Table 12-7 summarizes the total incremental trips by mode and the average modal split at each station.

**Table 12-6. Penn Station New York and Proposed Bronx Stations' Study Areas: Modal Split (AM Peak Hour)**

| Station | Auto | Drop-off/ Pick-up | Taxi | Subway | Bus | Walk Only | Total |
|---|---|---|---|---|---|---|---|
| PSNY | 0% | 0% | 2% | 39% | 10% | 49% | 100% |
| Hunts Point | 1% | 1% | 9% | 15% | 46% | 28% | 100% |
| Parkchester-Van Nest | 2% | 3% | 5% | 0% | 40% | 50% | 100% |
| Morris Park | 1% | 2% | 7% | 0% | 47% | 43% | 100% |
| Co-op City | 4% | 6% | 8% | 0% | 45% | 37% | 100% |

Source: WSP, 2020

**Table 12-7. Penn Station New York and Proposed Bronx Stations' Study Areas: Total Incremental Trips (AM Peak Hour)**

| Station | Auto | Drop-off/ Pick-up | Taxi | Subway | Bus | Walk Only | Total |
|---|---|---|---|---|---|---|---|
| PSNY | 0 | 0 | 60 | 1,145 | 305 | 1,470 | 2,980 |
| Hunts Point | 5 | 15 | 30 | 70 | 210 | 120 | 450 |
| Parkchester-Van Nest | 10 | 20 | 25 | 0 | 210 | 265 | 530 |
| Morris Park | 5 | 15 | 40 | 0 | 285 | 275 | 620 |
| Co-op City | 20 | 35 | 50 | 0 | 245 | 200 | 550 |
| **TOTAL** | **40** | **85** | **205** | **1,215** | **1,255** | **2,330** | **5,130** |

Source: WSP, 2020

*Trip Assignments and Traffic Volumes*

MTA assigned trips by personal vehicle that the Proposed Project would generate to each of the stations' study areas based on the most logical route and availability of parking in each study area. MTA assigned taxi trips to/from PSNY to the existing taxi stands along Seventh and Eighth Avenues, adjacent to the station. Pick-up/drop-off trips and taxi trips at the four proposed Bronx stations were assigned to the curbside adjacent to the proposed new station's entrance point. MTA added these incremental trips to the No Action Alternative traffic volumes to develop traffic volumes for the Proposed Project for the five study areas.

### 12.3.3 Parking

The Proposed Project would not provide parking in the PSNY vicinity or at or near the proposed stations in the Bronx, which is consistent with Metro-North's policy of not providing parking for its stations within New York City. This is also consistent with the limited number of passengers expected to use personal vehicles to access PSNY and the four stations in the Bronx. At the stations north of the Bronx, MTA did not expect increased ridership to result in significant parking shortfalls since park-and-ride has generally declined over the past 10 years and the use of ridehailing services has increased. Therefore, MTA conducted a qualitative parking analysis in each study areas.

### 12.3.4 Transit

MTA used the RTFM ridership forecast to account for changes in transit usage patterns as a result of ongoing transit projects, including the ESA project and New York City Transit's (NYCT) Second Avenue Subway Phase I. In addition, the RTFM considers the effects of major development projects within the region and NYCT's future subway service plans. MTA used the RTFM to forecast ridership at PSNY and the proposed Bronx stations as well as ridership changes on the subway lines connecting to the Proposed Project service. MTA used the RTFM ridership forecast results and assumptions from previous studies in combination to estimate the net

increase in vehicle trips, parking demand, transit trips, and pedestrian trips with the No Action Alternative and the Proposed Project. Since the RTFM is an AM peak-period forecasting model, the transit analysis focused on the AM peak hour.

At PSNY, reductions in transfers due to the ESA project would largely offset transfers from Proposed Project trains to subways and buses, which would divert passengers bound for Manhattan's East Side from PSNY to GCT. As described in Section 2.6.1, "Penn Station New York Operations," the ESA project will divert roughly 40,000 AM peak-period inbound passenger-trips from PSNY to GCT, while the Proposed Project would bring approximately 6,040 AM peak-period inbound passenger-trips into PSNY. Because of the low number of additional (transfer) trips to buses and subways generated by the Proposed Project (see Table 12-6), MTA determined that a qualitative transit analysis was appropriate, with a focus on the available capacity of transit services.

The transit analysis focused on the availability and capacity of transit services to handle potential transfers between the Proposed Project service at PSNY and the proposed Bronx stations and nearby subway and bus modes. In each of the Bronx stations' study areas, MTA reviewed NYCT bus routes to identify any routes that could be adjusted to provide more direct service between the new stations and their respective catchment areas without adversely affecting currently served areas. MTA would coordinate any Proposed Project route adjustments with NYCT to confirm that such modifications are feasible in the context of NYCT's overall route and service planning, and that such route adjustments would be consistent with NYCT plans.

### 12.3.5 Pedestrians

MTA performed pedestrian counts for existing volumes per pedestrian facility for both the AM and PM peak hours to generate the peak 15-minute volumes for each period. Similar to the transit analysis, reductions in pedestrian volume reductions due to the ESA project would largely offset potential Proposed Project impacts on pedestrian circulation on sidewalks, corners and crosswalks around PSNY. Further, the incremental increases in pedestrian volumes on facilities surrounding the proposed station areas would not exceed *CEQR Technical Manual* thresholds for analysis. Under *CEQR Technical Manual*, a project that generates under 200 new pedestrian trips per facility is considered below the threshold of significance. This will be discussed further below.

## 12.4 EXISTING CONDITIONS

### 12.4.1 Penn Station New York

#### *12.4.1.1 Traffic*

MTA analyzed 10 key intersections in the PSNY study area (see Figure H-1 in Appendix H, "Transportation"). The street network within the PSNY study area comprises a grid of avenues and streets with the following general characteristics:

- **Avenues –** Avenues generally operate one-way north-south and are about 60 to 70 feet wide, curb-to-curb, with four to five travel lanes, depending on location and time of day. Sidewalk widths typically vary between 15 and 20 feet. The avenues alternate travel direction, with Seventh Avenue running southbound and Eighth Avenue running northbound. Designated taxi stands are located on Seventh and Eighth Avenues

adjacent to the station entrances/exits. A bicycle lane runs northbound on Eighth Avenue on the western side of the avenue within the study area.

- **Streets –** Streets generally operate east-west (cross-town) with most carrying one-way traffic with curb-to-curb street widths from 30 to 34 feet and sidewalk widths of 10 to 15 feet. These one-way streets generally carry one to three lanes of traffic, depending on location and time of day. Even-numbered streets generally serve eastbound traffic while odd-numbered streets generally serve westbound traffic. The major two-way, east-west cross street in the study area is West 34th Street, which has a curb-to-curb width of about 50 feet and sidewalk widths ranging from 20 to 24 feet. West 34th Street operates with one to two lanes in each direction with a dedicated bus lane on the north and south sides of the street.
- **Exceptions to the street grid system –** PSNY interrupts the regular Midtown Manhattan street grid on West 32nd Street between Seventh and Eighth Avenues.

Based on existing traffic volumes, the AM peak hour in the PSNY study area is 8:15 a.m. to 9:15 a.m. and the PM peak hour is 6:00 p.m. to 7:00 p.m. Due to the congested nature of the PSNY study area and constrained traffic flows during this period, MTA calibrated the PM Synchro model to represent the 5:00 p.m. to 6:00 p.m. observed field conditions using the higher 6:00 p.m. to 7:00 p.m. traffic volumes (see Figure H-4 in Appendix H, "Transportation").

Tables H-1 and H-2 in Appendix H provide the capacity analysis results for the AM and PM peak hours, respectively, which includes LOS, v/c ratio, and average delays for all conditions.

In existing conditions, two discrete intersection movements (the left turn of West 34th Street at Seventh Avenue and the left turn of West 34th Street at Eighth Avenue) operate at LOS E or F during the both the AM and PM peak hours. However, overall, the analyzed intersections operate at LOS D or better during both the AM and PM peak hours (see Tables H-1 and H-2 in Appendix H).

#### *12.4.1.2 Parking*

Existing on-street curbside parking in the PSNY study area is generally prohibited between 7:00 a.m. and 7:00 p.m. Only loading and unloading of trucks are permitted. Numerous off-street parking lots and garages within the study area are heavily used during the day and evening, particularly for events held at Madison Square Garden.

#### *12.4.1.3 Transit*

PSNY is a major transportation hub for Amtrak, Long Island Rail Road (LIRR), and NJ TRANSIT services. The NYCT-operated subways serving PSNY include the A, C, E, and 1, 2, and 3 Lines. In addition, seven NYCT bus routes (M4, M7, M11, M20, Q32, SBS M34, and SBS M34A) serve the PSNY area. The bus stops are along West 34th Street (SBS M34 and SBS M34A) and along Seventh Avenue (M4, M7, M20 and Q32) and Eighth Avenue (M20). Nearby, the Broadway subway lines (N, Q, R and W) and the Sixth Avenue Lines (B, D, F, M) all stop one block east at Herald Square. Also nearby, the M11 bus stops one block west of PSNY on Ninth Avenue. Lastly, the M5 and M55 buses stop one block east of PSNY on Sixth Avenue (see Figures H-2 and H-3 in Appendix H).

#### *12.4.1.4 Pedestrians*

Pedestrians rely on connections to buses and other modes of transportation using the existing Americans with Disabilities Act-compliant sidewalks and crosswalks surrounding the station. MTA performed pedestrian data collection for 26 pedestrian facilities in the PSNY area. Sidewalks, corners, and crosswalks in the PSNY area already experience significant congestion during the AM and PM peak periods today. Volumes tend to be higher north and east of PSNY owing to workers heading to midtown east employment areas (Rockefeller Center, Park and Madison Avenues); congestion also depends on the physical dimensions and obstructions found on each sidewalk, corner, or crosswalk.

### 12.4.2 Segment 2 (Hunts Point Station Area)

#### *12.4.2.1 Hunts Point Station Area*

**TRAFFIC**

MTA would locate the proposed Hunts Point Station below street grade in the HGL railroad cut; the station platforms would extend beneath Hunts Point Avenue between Bruckner Boulevard and Garrison Avenue in the Bronx. Access to/from the station would be from Hunts Point Avenue. Hunts Point Avenue has one travel lane in each direction; turning lanes are provided at major intersections in the study area. Parking lanes are also provided on both sides of Hunts Point Avenue south of Garrison Avenue. Garrison Avenue has one travel lane, one bike lane, and one parking lane in each direction. Barretto Street is one-way southbound south of Bruckner Boulevard and two-way with one travel lane and one parking lane in each direction north of Bruckner Boulevard.

Based on existing traffic volumes, MTA determined the peak hours to be 7:45 a.m. to 8:45 a.m. and 4:30 p.m. to 5:30 p.m. (see Figure H-5 in Appendix H, "Transportation").

MTA performed traffic analyses at five key intersections in the Hunts Point Station area. Tables H-3 and H-4 in Appendix H provide the capacity analysis results for the AM and PM peak hours, respectively, which includes LOS, v/c ratio, and average delays for all conditions.

Based on the capacity analysis, three movements during the AM peak hour and six movements in the PM peak hour operate at either LOS E or F:

- Hunts Point Avenue eastbound at Lafayette Avenue, LOS F in the AM and PM
- Hunts Point Avenue eastbound at Garrison Avenue, LOS F in the AM and PM
- Hunts Point Avenue westbound at Bruckner Boulevard N, LOS E in the AM
- Bruckner Boulevard South northbound left at Hunts Point Avenue, LOS F in the PM
- Bruckner Boulevard South southbound left at Hunts Point Avenue, LOS F in the PM
- Bruckner Boulevard North northbound left at Hunts Point Avenue, LOS F in the PM
- Bruckner Boulevard North southbound at Hunts Point Avenue, LOS E in the PM

However, for the overall intersections, all but one of the analyzed intersections operate at LOS D or better during both the AM and PM peak hours. The intersection of Bruckner Boulevard South and Hunts Point Avenue operates at LOS C in the AM peak hour and LOS F in the PM peak.

**PARKING**

There is no weekday, daytime, on-street curbside parking on Hunts Point Avenue between Bruckner Boulevard and Garrison Avenue, directly by the proposed station site; parking is prohibited between 7:00 a.m. and 7:00 p.m., except on Sundays. On-street parking is generally permitted along the rest of Hunts Point Avenue and other nearby streets, with applicable street-cleaning restrictions. On-street parking available on Southern Boulevard and other streets north of the Hunts Point peninsula generally have both street-cleaning restrictions and, along stretches, 1-hour metered parking. Resident use on-street parking for commercial activity.

**TRANSIT**

Three local bus routes (Bx5, Bx6, and Bx19), a select bus service route (SBS 6), and the No. 6 subway line (see Figure H-6 in Appendix H, "Transportation") serve the Hunts Point Station area. The Bx6 and SBS 6 are the nearest bus routes, running north/south along Hunts Point Avenue south of Southern Boulevard and along East 163rd Street north of Southern Boulevard. The Bx19 runs along Southern Boulevard north of the proposed station site. The SBS 6, Bx6, and B19 buses stop at the intersection of Hunts Point Avenue and Bruckner Boulevard, adjacent to the proposed station site. The Bx5 (Southern Boulevard) and the No. 6 subway line, with the subway station directly on the north side of Bruckner Boulevard, are within easy walking distance of the proposed Hunts Point Station.

#### *12.4.2.2 Pedestrians*

Pedestrians in the vicinity of the proposed Hunts Point Station site primarily walk north-south along either side of Hunts Point Avenue, heading to/from the No. 6 subway line and the commercial shopping on Southern Boulevard. Pedestrians walking this path need to pass in front of the entrance ramp to the Sheridan Expressway, cross six lanes of Bruckner Boulevard, while going beneath the Bruckner Expressway. Although lengthy, this pathway is Americans with Disabilities Act-compliant. The pedestrian LOS for facilities in the Hunts Point Station area is B, which is generally considered good.

### 12.4.3 Segment 3 (Parkchester-Van Nest, Morris Park, and Co-op City Station Areas)

#### *12.4.3.1 Parkchester-Van Nest Station Area*

**TRAFFIC**

MTA would locate the proposed Parkchester-Van Nest Station on the north side of East Tremont Avenue and east of Unionport Road in the Bronx. MTA performed the traffic analyses for five key intersections in the Parkchester-Van Nest Station area (see Figure H-7 in Appendix H). Unionport Road has one narrow travel lane in each direction where it crosses over the rail tracks via the Unionport Road Bridge. South of East Tremont Avenue, Unionport Road has one travel lane and one parking lane in each direction, separated by a median. White Plains Road has two travel lanes and one parking lane in each direction. East Tremont Avenue has two travel lanes and one parking lane in each direction, separated by a median.

Based on existing traffic volumes, MTA determined the peak hours to be 8:30 a.m. to 9:30 a.m. and 5:00 p.m. to 6:00 p.m.

MTA performed traffic analysis for five key intersections in the Parkchester-Van Nest Station area. Tables H-5 and H-6 in Appendix H provide the capacity analysis results for the AM and PM peak hours, respectively, which includes LOS, v/c ratio, and average delays for all conditions.

Based on the capacity analysis, one movement during the AM peak hour and one movement during the PM peak hour operate at either LOS E or F (Dogwood Drive at East Tremont Avenue).

**PARKING**

On-street parking in the proposed Parkchester-Van Nest Station's vicinity is limited and local residents fully utilize the on-street parking for commercial activity. White Plains Road and East Tremont Avenue have alternate side of the street parking restrictions for street-cleaning purposes. Two privately owned parking garages/lots along East Tremont Avenue are within walking distance of the proposed station site.

**TRANSIT**

Five local bus routes (Bx4A, Bx22, Bx39, Bx40, and Bx42) serve the proposed Parkchester-Van Nest Station site (see Figure H-8 in Appendix H, "Transportation"). Existing bus stops for the Bx4A, Bx40 and Bx42 bus routes are located on both sides of East Tremont Avenue near the proposed station site. Nearby bus stops for the Bx22 and Bx39 routes are located on Unionport Road (Bx22) and White Plains Road (Bx39), west of and within easy walking distance of the station site. The closest subway stations are the No. 6 subway at Hugh Grant Circle (five blocks to the south) or the Nos. 2 and 5 subways at East 180th Street (10 blocks to the northwest).

**PEDESTRIANS**

Pedestrians in the vicinity of the proposed Parkchester-Van Nest Station site primarily flow north-south on White Plains Road or Unionport Avenue through the Parkchester neighborhood to/from the No. 6 subway and farther north into the Van Nest community or east/west on East Tremont or Metropolitan Avenues. The sidewalks near the proposed Parkchester-Van Nest Station area are lightly used, with a pedestrian LOS of A. These sidewalks are Americans with Disabilities (ADA) compliant.

### *12.4.3.2 Morris Park Station Area*

**TRAFFIC**

MTA would locate the proposed Morris Park Station immediately west of Morris Park Avenue and Bassett Avenue. MTA analyzed 10 key intersections for the Morris Park Station (see Figure H-9 in Appendix H). Eastchester Road is the major north-south street running through the study area, providing access to the Bronx and Pelham Parkway in the north. Eastchester Road has two travel lanes in each direction, turning lanes at major intersections, and one parking lane in each direction. Bassett Avenue has one travel lane and one parking lane in each direction. Morris Park Avenue is the major east-west route running through the study area, and has two travel lanes and one parking lane in each direction. Regional access via the Hutchinson River Parkway and New England Thruway (I-95)/Bruckner Expressway (I-695) are less than 1 mile east of the proposed station site; the Bronx River Parkway is less than 2 miles from the proposed station site.

Based on the existing traffic volumes, MTA determined the peak hours to be 8:30 a.m. to 9:30 a.m. and 4:15 p.m. to 5:15 p.m. (see Figure H-11 in Appendix H).

MTA performed traffic analyses for 10 key intersections in the Morris Park Station area. Tables H-7 and H-8 in Appendix H provide the capacity analysis results for the AM and PM peak hours, respectively, which includes LOS, v/c ratio, and average delays for all conditions.

Based on the capacity analysis, three movements during the AM peak hour and two movements in the PM peak hour operate at either LOS E or F as follows:

- Eastchester Road southbound at Morris Park Avenue, LOS E in the AM
- Eastchester Road southbound at Pelham Parkway S, LOS E in the AM
- Eastchester Road northbound at Bronx and Pelham Parkway, LOS E in the PM
- Williamsbridge Road northbound at Morris Park Avenue, LOS E in the AM
- Pelham Parkway North westbound at Eastchester Road, LOS E in the PM

**PARKING**

On-street parking in the proposed Morris Park Station's vicinity is limited and local residents fully utilize the on-street parking throughout the day and for commercial activity. Several medical centers and a Marriot Hotel in the vicinity of the proposed station site generate steady parking demand throughout the day (however most have their own parking facilities). Three privately operated parking lots are in the station's vicinity—one along Sackett Avenue and the other two on Basset Road (near the Hutchinson Metro Center Atrium), a short walk from the proposed station location.

**TRANSIT**

Three local bus routes (Bx21, Bx24, Bx31) and one express route (BxM10) serve the Morris Park Station site (see Figure H-10 in Appendix H, "Transportation"). The Bx21, Bx31 and BXM10 routes' bus stops closest to the proposed station site are one block away, on Eastchester Road, while the Bx24 route's closest stop is on Marconi Street adjacent the Marriot Hotel. The closest subway station is the No. 6 subway at Middletown Road roughly 10 blocks away.

**PEDESTRIANS**

Pedestrians in the vicinity of the proposed Morris Park Station site primarily walk north-south on Eastchester Road, and east-west on Morris Park Avenue. Some pedestrians also walk along Marconi Street, from the Bx24 bus stop to the Hutchinson Metro Center, and between the Metro Center and the restaurants in the Metro Center Atrium. The sidewalks near the proposed Morris Park Station area are mostly American with Disabilities-compliant and lightly used, with a pedestrian LOS of A.

#### *12.4.3.3 Co-op City Station Area*

**TRAFFIC**

MTA would locate the proposed Co-op City Station south of Erskine Place, west of De Reimer Avenue, in the eastern Bronx. A combination of single-family homes and high-rise apartment buildings characterize the station site's immediate vicinity. A parking structure, operated by Co-op City's management (Riverbay Corporation), has vehicular access from Earhart Lane.

MTA analyzed seven intersections in the Co-op City Station area (see Figure H-12 in Appendix H). Most of the local streets (Erskine Place, Stillwell Avenue, Palmer Avenue north of Stillwell Avenue, Hutchinson River Parkway East, De Reimer Avenue, Hunter Avenue) in the study area are two-way streets with one travel lane and one parking lane in each direction. Boller Avenue between Hunter Avenue and Erskine Place and Palmer Avenue south of Stillwell Avenue are one-way streets with parking on both sides of the street. Regional access to I-95 and Hutchinson Parkway is immediately west of the study area.

Based on existing traffic volumes, MTA determined the peak hours to be 7:15 a.m. to 8:15 a.m. and 5:00 p.m. to 6:00 p.m. (see Figure H-12 in Appendix H).

MTA performed traffic analysis at seven key intersections in the Co-op City Station area. Tables H-9 and H-10 in Appendix H provide the capacity analysis results for the AM and PM peak hours, respectively, which includes LOS, v/c ratio, and average delays for all conditions.

All of the movements at the seven intersections in the Co-op City Station area operate at better than LOS E or F during the AM and PM peak hours.

**PARKING**

Existing on-street curbside parking in the Co-op City study area comprises more than 400 parking spaces, with an approximately 30 percent utilization rate during the peak-period analysis hours. Parking is prohibited during a weekly 90-minute street-cleaning period. A parking garage with a capacity of 1,361 spaces, located near the proposed station site, is available only to Co-op City residents.

**TRANSIT**

Six NYCT local bus routes (Bx23, Bx26, Bx28, Bx29, Bx30, and Q50) and one express route (BxM7) serve the Co-op City Station area (see Figure H-13 in Appendix H, "Transportation"). Existing bus stops nearest the station site are on Earhart Lane north of Erskine Place. The Bx29 route and the Bx23 have a stop directly adjacent to the proposed station site. Five local bus routes (Bx23, Bx26, Bx28, Bx30, and Q50) terminate three blocks away on Earhart Lane. The BxM7 route provides service between Co-op City/Pelham Bay and midtown Manhattan and stops about one-quarter mile north of the station site, at Einstein Loop E and Elgar Place. No subway services are near this site.

**PEDESTRIANS**

The few pedestrians in the vicinity of the proposed Co-op City Station site primarily walk east on Erskine Place, and north on De Reimer Avenue heading toward the various bus stops. The sidewalks near the proposed station are ADA compliant and function at a pedestrian LOS of A.

### 12.4.4 New Haven Line Existing Rail Operations

Metro-North's NHL is the Northeast Corridor's main line track portion that runs from New Haven to CP 112 - Woodlawn Junction. From there, the NHL connects to the Harlem Line to continue to the GCT. The NHL functions as both a local and through railroad.

Locally, Metro-North trains deliver travelers to and from New York City, 8 stations in Westchester County, and 36 stations in Connecticut (which owns its portion of the NHL east of the state border). Connecticut Department of Transportation Shore Line East trains provide limited commuter-rail service west of New Haven to Stamford (at seven stations) on the mainline. Amtrak provides long-distance intercity passenger service, which connects along the Northeast Corridor the major urban hubs of the Northeast. Amtrak serves the NHL stations of New Rochelle, Stamford, Bridgeport, and New Haven; Amtrak also serves the Shore Line East stations of Old Saybrook and New London.

Two freight carriers, CSX and Genesee & Wyoming, operate on portions of the line as well. CSX uses the NHL to operate a daily local delivery train, as needed, between Noroton Heights on the NHL and the Oak Point Yard on the HGL. These deliveries usually occur at night. Genesee & Wyoming runs approximately three freight trains per week in each direction via the NHL and HGL in the late night and very early morning hours. These trains carry bulk items (mostly ballast stone) between locations in Connecticut and Long Island.

Currently, Metro-North commuter trains access GCT while Amtrak trains access PSNY via the HGL portion of the Northeast Corridor, splitting from the NHL at CP 216 - Shell Interlocking in New Rochelle. On an average weekday, more than 400 trains operate on the NHL main line (and its branches) (Table 12-8).

**Table 12-8. Metro-North New Haven Line Weekday Service – Existing Conditions**

| Line/Service | Number of Trains to/from Grand Central Terminal |
|---|---|
| **NHL Main Line** | **246** |
| New Haven | 86 |
| Stamford | 160 |
| New Canaan Branch | **52** |
| Danbury Branch | **28** |
| Waterbury Branch | **15** |
| **TOTAL** | **441** |

Source: MTA, 2017

### 12.4.5 Hell Gate Line Existing Rail Operations

As noted in Section 2.6, "Operations," Amtrak's HGL runs from CP 216 – Shell Interlocking in New Rochelle over the Hell Gate Bridge and onto Harold Interlocking in Queens, where it joins the Long Island Rail Road Main Line to the East River Tunnels and on to PSNY.

Freight service diverges from the passenger tracks at Pelham Bay Interlocking onto Track 5, which connects to the Oak Point Yard and Market branches. Freight tracks continue westward to connect to the Oak Point Link and rise up the viaduct to traverse the Hell Gate Bridge to the Bay Ridge connection to Maspeth, Queens. Similar to the NHL operations, Amtrak operates both regional and high-speed Acela intercity passenger service (between PSNY and Boston). Amtrak provides service roughly every half-hour on the line.

CSX and Genesee & Wyoming operate freight service on the HGL. Similar to the operations on the NHL, freight operations that traverse the HGL occur during late night hours, outside of typical passenger train operating times. CSX also operates the Oak Point Yard, connected to the HGL in the Hunts Point section of the Bronx. CSX and Genesee & Wyoming use the yard to service the Hunts Point Market via the Market Branch, and to Long Island for trains originating from points north via the Oak Point Link. CSX also assembles garbage trains on the tracks leading eastward from Oak Point Yard (Tracks 5 and 6). These trains originate from the Harlem River Yard farther along the Oak Point Link. Table 12-9 depicts the total number of weekday trains operating on the HGL.

**Table 12-9. Hell Gate Line Weekday Service – Existing Conditions**

| Amtrak | Metro-North | CSX (freight) | TOTAL |
|---|---|---|---|
| 42 | 0 | 2 | **44** |

Source: MTA, 2018

## 12.5 NO ACTION ALTERNATIVE

### 12.5.1 Penn Station New York

#### *12.5.1.1 Traffic*

Figure H-14 in Appendix H, "Transportation," shows the traffic volumes for the No Action Alternative in the PSNY study area. Tables H-1 and H-2 in Appendix H provide the capacity analysis results for the AM and PM peak hours, respectively, which includes LOS, v/c ratio, and average delays for all conditions.

With the No Action Alternative, eight movements will operate at LOS E or F during the AM peak hour and two movements will operate at LOS E or F in the PM peak hour:

- West 31st Street westbound at Seventh Avenue, LOS F in the AM
- Seventh Avenue southbound at West 32nd Street, LOS E in the AM
- West 34th Street eastbound at Seventh Avenue, LOS E in the AM and PM
- Left turn of West 34th Street at Seventh Avenue, LOS F in the AM
- West 30th Street eastbound at Eighth Avenue, LOS E in the AM
- Eighth Avenue northbound at West 31st Street, LOS F in the AM
- Eighth Avenue northbound at West 33rd Street, LOS F in the AM
- Eighth Avenue northbound at West 34th Street, LOS E in the PM
- Left turn of West 34th Street eastbound at Eighth Avenue, LOS E in the AM

For the overall intersections, four intersections will operate at LOS E or F during the AM peak hour and one intersection in the PM peak hour (LOS E), due to background growth and the effects of future development projects such as the Western Rail Yards development.[4] The intersections that will operate at LOS E or F during AM peak hour are as follows:

- Seventh Avenue and West 31st Street, LOS E
- Seventh Avenue and West 32nd Street, LOS E
- Eighth Avenue and West 31st Street, LOS E
- Eighth Avenue and West 33rd Street, LOS F

During the PM peak hour, the intersection of Eighth Avenue and West 34th Street will operate at LOS E in the No Action Alterative. In order to be conservative, no credits were taken for reduction in traffic volume in the PSNY vicinity due to the ESA project. In addition, the Central Business District Tolling Program, which is intended to discourage driving in the most congested area of New York City (south of 60th Street in Manhattan), including around PSNY, is planned for implementation prior to the completion of the Proposed Project. However, the National Environmental Policy Act (NEPA) process has not yet been completed for the program, so MTA did not consider the reduction in traffic volume in this analysis.

[4] The Western Rail Yard development would include approximately 6,220,000 square feet, incorporating several residential towers, an office complex and a school serving Kindergarten through 8th-grade students.

### *12.5.1.2 Parking*

Existing auto trips to/from PSNY principally comprise taxis and car services, which do not require parking at or near the station. MTA expects this pattern to continue with the No Action Alternative. Sufficient off-street parking will likely be available in the No Action Alternative through the combined capacity of existing parking facilities and parking supply that will be added as part of some of the development projects slated for completion in the study area by 2025.

### *12.5.1.3 Transit*

With the No Action Alternative, programmed and committed development projects and major transit improvement projects that will be completed by 2025—including Moynihan Phase II, and ESA—will change subway travel patterns in Manhattan, particularly at GCT and PSNY. Table 12-10 shows the change in PSNY subway ridership due to the ESA project.

**Table 12-10. Penn Station New York Study Area: East Side Access Project Change in Subway Transfers – No Action Alternative (AM Peak Period)**

| Subway Lines | Southbound | Northbound |
|---|---|---|
| A/C/E Subway Lines | -501 | -14,304 |
| Nos. 1/2/3 Subway Lines | -1,644 | -186 |

Source: East Side Access Final Environmental Impact Statement, Table 9B-5 (modified format), Page 9B-8. 2001

This change will not modify NYCT levels-of-service provided for either of the subway lines, as other stations (not PSNY) are the lines' peak load points and, therefore, influence the level-of-service.[5]

### *12.5.1.4 Pedestrians*

Following implementation of ESA, sidewalks and crosswalks in the PSNY area will perform better in 2025 than today with the reduction of LIRR travelers (roughly 40,000 AM peak-period inbound passenger-trips).[6] This reduction will predominantly be on those facilities heading to midtown employment areas north and east from the station (Rockefeller Center, Park and Madison Avenues). Additionally, the Moynihan Station Project Phase II was opened at the end of 2020, providing additional waiting space for rail passengers, station complex exits to Ninth Avenue, and vertical circulation to/from the station platforms. Lastly, the new Penn Station New East End Gateway and LIRR Concourse was completed at the end of 2020, widening the LIRR 33rd Street Concourse, further reducing station crowding and providing an additional exit to the street for the station complex.

[5] According to 2017 NYCT Ridership Book, Jay Street in Brooklyn is the peak load point for the A/C trains, Roosevelt Avenue in Queens is the peak load point for the E train, West 103rd Street in Manhattan is the peak load point for the No. 1 train, and West 72nd Street in Manhattan is the peak load point for the Nos. 2/3 trains.

[6] MTA/LIRR East Side Access FEIS Table 9B-2 shows 62,249 LIRR am peak period arrivals in PSNY as compared to 103,856 in the No-Action condition

## 12.5.2 Segment 2 (Hunts Point Station Area)

### *12.5.2.1 Hunts Point Station Area*

**TRAFFIC**

Figure H-15 in Appendix H, "Transportation," shows the traffic volumes for the No Action Alternative in the Hunts Point Station area. Tables H-3 and H-4 in Appendix H provide the capacity analysis results for the AM and PM peak hours, respectively, which includes LOS, v/c ratio, and average delays for all conditions.

Based on the capacity analysis, while no additional movements will operate at LOS E, the intersection of Bruckner Boulevard North and Hunts Point Avenue will degrade (LOS D to LOS E).

With the No Action Alternative, the roadway network will experience changes to the Sheridan and Bruckner Expressways but no major changes to the immediate local streets within the study area. The intersection at Bruckner Boulevard North and Hunts Point Avenue will operate at LOS E in the AM peak hour. In the PM peak hour, the intersection will maintain operation at LOS D.

**PARKING**

Based on the inventory of No Action Alternative development projects (Chapter 2, "Project Alternatives") that are programmed and committed for completion by 2025, there are no future plans to increase the parking supply near the proposed station. MTA expects that parking conditions with the No Action Alternative will be similar to existing conditions in the study area.

**TRANSIT**

Transit service in the station area with the No Action Alternative will be similar to existing conditions; MTA identified no transit improvement or expansion projects in the Hunts Point Station area for implementation by 2025.

**PEDESTRIANS**

MTA expects pedestrian facilities in the proposed Hunts Point Station area to operate at similar levels to the existing conditions. However, the intersection of Hunts Point Avenue, the Sheridan Expressway entrance ramp, and Bruckner Boulevard will be simplified by eliminating the ramp.

## 12.5.3 Segment 3 (Parkchester-Van Nest, Morris Park, and Co-op City Station Areas)

### *12.5.3.1 Parkchester-Van Nest Station Area*

**TRAFFIC**

Figure H-16 in Appendix H, "Transportation," shows the traffic volumes for the No Action Alternative in the Parkchester-Van Nest Station area. Tables H-5 and H-6 in Appendix H provide the capacity analysis results for the AM and PM peak hours, respectively, which includes LOS, v/c ratio, and average delays for all conditions.

With the No Action Alternative, one additional movement will operate at LOS E during the AM peak hour (East Tremont Avenue westbound at White Plains Road) and four additional movements will operate at LOS E or F in the PM peak hour in the Parkchester-Van Nest Station area, as compared to existing conditions. The additional movements follow:

- East Tremont Avenue westbound at Unionport Road, LOS E
- East Tremont Avenue westbound at White Plains Road, LOS E
- Unionport Road southbound at East Tremont Avenue, LOS E
- White Plains Road southbound at East Tremont Avenue, LOS E

No intersections will operate at LOS E or F with the No Action Alternative.

**PARKING**

Curbside parking in the Parkchester-Van Nest Station area is likely to remain fully utilized with the No Action Alternative. MTA identified no plans to supplement the existing parking supply in the Parkchester-Van Nest Station area for the No Action Alternative.

**TRANSIT**

Transit service in the Parkchester-Van Nest Station area with the No Action Alternative will be similar to existing conditions; MTA identified no transit improvement or expansion projects in the station area for implementation by 2025.

**PEDESTRIANS**

Pedestrian facilities in the proposed Parkchester-Van Nest Station area are expected to operate at similar levels to existing conditions.

### *12.5.3.2 Morris Park Station Area*

**TRAFFIC**

Figure H-17 in Appendix H, "Transportation," shows the traffic volumes for the No Action Alternative in the Morris Park Station area. During both the AM and PM peak hours with the No Action Alternative, four additional movements will operate at LOS E:

- Eastchester Road southbound at Bronx and Pelham Parkway, LOS E in the AM
- Eastchester Road northbound at Pelham Parkway South, LOS E in the PM
- Pelham Parkway North westbound at Eastchester Road, LOS E in the AM
- Bronx and Pelham Parkway at Stillwell Avenue, LOS E in the PM

The intersection of Morris Park Avenue and Eastchester Road will operate at LOS E in the AM peak hour, and the intersection of Bronx and Pelham Parkway and Eastchester Road will operate at LOS E in the PM peak hour. All other analyzed intersections will continue to operate at LOS D or better in the AM and PM peak hours (see Tables H-7 and H-8 in Appendix H).

**PARKING**

MTA identified no future plans to increase the public parking supply near the proposed Morris Park Station area for the No Action Alternative; MTA expects that the station area's parking supply will continue to be heavily utilized.

**TRANSIT**

Transit service in the study area with the No Action Alternative will be similar to existing conditions; MTA identified no transit improvement or expansion projects for the Morris Park Station area for implementation by 2025.

**PEDESTRIANS**

With the No Action Alternative, MTA expects pedestrian facilities in the proposed Morris Park Station area to operate at similar levels to existing conditions.

#### *12.5.3.3 Co-op City Station Area*

**TRAFFIC**

Figure H-18 in Appendix H, shows the traffic volumes for the No Action Alternative in the Co-op City Station area. For the No Action Alternative, the movements at the seven intersections in the Co-op City Station area will remain at better than LOS E or F during the AM and PM peak hours.

**PARKING**

MTA identified no future plans to increase the public parking supply near the proposed Co-op City Station site for the No Action Alternative. MTA expects that future No Action Alternative parking conditions will be similar to existing conditions in the Co-op City Station area.

**TRANSIT**

Transit service in the Co-op City Station area with the No Action Alternative will be similar to existing conditions; MTA identified no transit improvement or expansion projects in the Co-op City Station area for implementation by 2025.

**PEDESTRIANS**

For the No Action Alternative, MTA expects pedestrian facilities in the proposed Co-op City Station area to operate at similar levels to the existing conditions.

### 12.5.4 New Haven Line No Action Alternative Rail Operations

Under the No Action Alternative, MTA expects commuter-rail service operated by Metro-North to generally remain the same as under existing conditions with largely the same number and frequency of trains operating to and from GCT (see Section 12.4.4, "New Haven Line Existing Rail Operations"). As demand continues to grow on the NHL and other service territories, Metro-North is considering various options to provide additional capacity on scheduled trains, including but not limited to lengthening trainsets. Other expected changes on the NHL by 2025 include planned state-of-good-repair-related improvements for select segments of track, power, signals and crossing locations. Schedules received from Amtrak show slightly increased service for the year 2025, with an additional Acela train per hour and some additional regional train service during off-peak periods and fringe peak periods. This will raise the daily total of Amtrak trains to 60, which, according to operation simulations analyses, can be accommodated with little degradation of rail service (see Appendix A, "Penn Station Access Future Build – Option J1 Network Simulation Report").

Information from the freight railroads indicate they plan to expand operations along the NHL (assuming market demands increase) by potentially an additional train per day. Similar to the existing freight service, these

additional operations will occur outside of the peak passenger travel hours and will have no impact on passenger services.

### 12.5.5 Hell Gate Line No Action Alternative Rail Operations

As noted in Chapter 2, "Project Alternatives" and the NHL discussion above, Amtrak will be introducing its next generation high-speed Acela trainset in 2021. The expectation is that by 2025, Amtrak will begin to operate an additional Acela train per hour throughout the day.[7] As noted above, the freight railroads plan to expand by an additional train per day, outside peak passenger service operating times. Operations analyses have found that the impact of this increase in the number of trains on the HGL will be negligible (see Appendix A, "Penn Station Access Future Build – Option J1 Network Simulation Report"). Table 12-11 shows the existing and No Action Alternative weekday number of trains on the HGL.

**Table 12-11. Hell Gate Line Weekday Service – Existing and No Action Alternative**

| Weekday Trains | Amtrak | Metro-North | CSX (freight) | TOTAL |
|---|---|---|---|---|
| Existing | 42 | 0 | 2 | **44** |
| No Action Alternative | 60 | 0 | 3 | **63** |

Source: MTA, 2018

[7] Although Amtrak ridership is down considerably as a result of the COVID-19 pandemic and there have been temporary changes to operations, MTA assumes the operations plan for 2025 will be maintained.

## 12.6 PROPOSED PROJECT

### 12.6.1 Penn Station New York

#### *12.6.1.1 Operations*

As described in Section 2.6.1, "Penn Station New York Operations," under the No Action Alternative, fewer LIRR trains will terminate at PSNY with the introduction of ESA service to GCT and the number of Amtrak trains will increase slightly due to Amtrak's new high-speed trains, which are expected to be delivered in 2021.[8] Amtrak expects to increase Acela service by one additional train per hour on the HGL. Table 2-2 summarizes the existing, the No Action Alternative, and Proposed Project trains operating within PSNY for the AM peak period (6 a.m. to 10 a.m.) and PM peak period (4 p.m. to 8 p.m.).

**Table 12-12. Penn Station New York Revenue AM Peak-Period Train Arrivals and PM Peak-Period Departures**

| Peak-Period | Existing | | | No Action Alternative | | | Proposed Project | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | LIRR | Amtrak | Total | LIRR | Amtrak | Total | Metro-North | LIRR | Amtrak | Total |
| AM Peak (6 a.m. to 10 a.m.) PSNY Arrivals | 99 | 3 | **102** | 87 | 14 | **101** | 12 | 87 | 14 | **113** |
| PM Peak (4 p.m. to 8 p.m.) PSNY Departures | 88 | 6 | **94** | 77 | 16 | **93** | 12 | 77 | 16 | **105** |

Source: LIRR, Amtrak, and Metro-North, 2020.

MTA analyzed operations of the HGL segment for the baseline (2016), No Action Alternative, and Proposed Project in its ability to handle the additional service load.[9] Table 12-13 and Table 12-14 summarize the findings as delay minutes per 100 train-miles for 24-hour and AM peak periods, respectively. The AM peak period is typically more demanding than the PM peak period because there is more flexibility in evening schedules, resulting in more "shoulder" (i.e., non-peak intensity) time. Train delay per 100 train-miles may be higher during the AM peak period than the delay for the entire 24-hour simulation because there is more signal delay during the AM peak period and the metric is normalized (per 100 train-miles).

The PSNY (West of Gate Interlocking) segment recorded the most delay of the entire network due to the density of trains within, entering, and departing PSNY, though the change between the No Action Alternative and Proposed Project for any operation and service is less than one minute over the segment. Although there are delays in the West of Gate segment, simulation of the entire network showed that LIRR and Amtrak trains operated at 100 percent on-time performance at the standard reporting threshold of 6 minutes late. Existing Metro-North trains operated very close to 100 percent on-time performance.

[8] As provided by Amtrak *HST2020 schedule revised Dec2018*

[9] Service west of the Gate Interlocking was used to represent the PSNY operations in the simulations. The segment is 5.1 miles long.

### Table 12-13. Penn Station New York Weekday (24 hours) Service – Baseline, No Action Alternative, and Proposed Project

| Operator and Service | Baseline (2016) | | | No Action Alternative | | | Proposed Project | | | Change in Delay-Minutes per Segment (No Action Alternative to Proposed Project) |
|---|---|---|---|---|---|---|---|---|---|---|
| | # of Trains | Delay-Minutes / 100 Train-Miles | Delay-Minutes per Segment | # of Trains | Delay-Minutes / 100 Train-Miles | Delay-Minutes per Segment | # of Trains | Delay-Minutes / 100 Train-Miles | Delay-Minutes per Segment | |
| Amtrak Acela | 20 | 12.3 | 0.63 | 28 | 10.4 | 0.53 | 28 | 6.6 | 0.34 | -0.19 |
| Amtrak Regional | 23 | 22.6 | 1.15 | 32 | 4.2 | 0.21 | 32 | 18.5 | 0.94 | 0.73 |
| Metro-North to PSNY | — | — | — | — | — | — | 101 | 14.7 | 0.75 | — |
| Metro-North to GCT | — | — | — | — | — | — | — | — | — | — |
| LIRR* | 608 | 7.7 | 0.39 | 889 | 4.1 | 0.21 | 518 | 10.1 | 0.52 | 0.31 |

Source: Gannett Fleming, 2021

— Not Applicable

* LIRR train timetable was different for each of the simulation cases. LIRR requested using a more refined proforma train timetable for the Proposed Project.

### Table 12-14. Penn Station New York AM Peak (6:00-10:00 AM) Service – Baseline, No Action Alternative, and Proposed Project

| Operator and Service | Baseline (2016) | | | No Action Alternative | | | Proposed Project | | | Change in Delay-Minutes per Segment (No Action Alternative to Proposed Project) |
|---|---|---|---|---|---|---|---|---|---|---|
| | # of Trains | Delay-Minutes / 100 Train-Miles | Delay-Minutes per Segment | # of Trains | Delay-Minutes / 100 Train-Miles | Delay-Minutes per Segment | # of Trains | Delay-Minutes / 100 Train-Miles | Delay-Minutes per Segment | |
| Amtrak Acela | 6 | 22.9 | 1.17 | 8 | 6.7 | 0.34 | 8 | 3.9 | 0.20 | -0.14 |
| Amtrak Regional | 4 | 36.3 | 1.85 | 8 | 12.5 | 0.64 | 8 | 8.1 | 0.41 | -0.23 |
| Metro-North to PSNY | — | — | — | — | — | — | 24 | 17.6 | 0.90 | — |
| Metro-North to GCT | — | — | — | — | — | — | — | — | — | — |
| LIRR* | 185 | 11.4 | 0.58 | 270 | 6.3 | 0.32 | 166 | 15.6 | 0.80 | 0.48 |

Source: Gannett Fleming, 2021

— Not Applicable

* LIRR train timetable was different for each of the simulation cases. LIRR requested using a more refined proforma train timetable for the Proposed Project.

Table 12-15 depicts the incremental trips by mode at PSNY for the Proposed Project.

**Table 12-15. Penn Station New York Study Area: Proposed Project Total Incremental Trips by Mode (AM Peak Hour)**

| Station | Auto | Drop-off/ Pick-up | Taxi | Subway | Bus | Walk Only | Total |
|---|---|---|---|---|---|---|---|
| Modal Split | 0% | 0% | 2% | 39% | 10% | 49% | **100%** |
| Incremental Trips by Mode (Total Ons and Offs) | 0 | 0 | 60 | 1,145 | 305 | 1,470 | **2,980** |

Source: WSP, 2020

### *12.6.1.2 Traffic*

Figures H-19 and H-24 in Appendix H, "Transportation," show the traffic volumes for the Proposed Project in the PSNY study area and the traffic-volume increment between the No Action Alternative and Proposed Project, respectively.

Tables H-1 and H-2 in Appendix H provide the capacity analysis results for the AM and PM peak hours, respectively, which includes LOS, v/c ratio, and average delays for all conditions.

During the AM peak hour, six intersections would continue to operate at LOS D or better as they do in the No Action Alternative. Four intersections that operate at LOS E or LOS F in the AM peak hour with the No Action Alternative would continue to operate at this condition with the Proposed Project. None of these intersections would have more than 10 seconds of increase in delay, compared to the No Action Alternative.

During the PM peak hour, eight intersections would continue to operate at LOS D or better with the Proposed Project, as with the No Action Alternative. For the two intersections that would operate at LOS E in the PM peak hour with the No Action Alternative, one intersection would continue to operate at the same LOS with the Proposed Project. Another intersection (Eighth Avenue and West 33rd Street) would operate at LOS E in the PM peak hour with the Proposed Project. This represents an increase of more than 10 seconds of delay as compared to the No Action Alternative.

Other than the one intersection that would operate at LOS E with the Proposed Project during the PM peak hour, the projected increase in traffic demand with the Proposed Project would not result in any adverse traffic impacts in the PSNY study area during either the AM or PM peak hours.[1]

### *12.6.1.3 Parking*

The Proposed Project would not add new parking spaces at or near PSNY. Project-generated auto trips would be limited (as shown in Table 12-11) and most of the auto trips would be made by taxi and car service, neither of which requires parking at or near the station. Therefore, the Proposed Project would have no significant parking impact in the PSNY study area.

### *12.6.1.4 Transit*

Ridership forecasting results project that subway lines directly serving PSNY would see a modest ridership increase in the AM peak period as a result of the PSA riders (Table 12-16). The Seventh Avenue Line (Nos. 1, 2 and 3 trains) would have an increase of about 1,320 passengers and the Eighth Avenue Line (Nos. A, C and

[1] This is based on a conservative analysis.

E trains) would have an increase of about 900 passengers during the AM peak period. Overall, all the subway lines serving PSNY would have a total increase of about 2,200 passengers in the AM peak period as a result of the PSA service. However, the increase in Metro-North transit ridership due to transferring would be less than the reduction of transit rider transfers associated with the ESA project. The net effect would result in no adverse impacts to transit services under the Proposed Project.

**Table 12-16. Penn Station New York Study Area: Change in Subway Transfers – No Action Alternative and Proposed Project (AM Peak Period)**

| Alternative | A/C/E Subway Trains | | Nos. 1/2/3 Subway Trains | |
|---|---|---|---|---|
| | Southbound | Northbound | Southbound | Northbound |
| No Action Alternative | -501 | -14,304 | -1,644 | -186 |
| Proposed Project | 170 | 730 | 1,100 | 220 |

Source: WSP, 2018

With the Proposed Project, Metro-North passenger volumes transferring to the subway would decline modestly for the subway lines that directly serve GCT. Based on ridership forecasting results, during the AM peak period the Lexington Avenue Line (Nos. 4, 5 and 6 trains) would have a decrease of about 2,220 transferring passengers with the Proposed Project, compared to the No Action Alternative. The Flushing Line (No. 7 train) would have a decrease of about 550 transferring passengers with the Proposed Project (compared to the No Action Alternative) during the AM peak period. Overall, the subway lines serving GCT would have a total decrease of about 2,770 transferring peak-period trips as a result of the Proposed Project.

The Proposed Project would generate about 610 bus passenger-trips in the study area), which would be distributed among the five local bus routes (M7, M11, M20, SBS M34, and SBS M34A) and in both directions of travel on each route; therefore, MTA expects that the increase in number of AM peak-period bus passengers on each route in each direction would be modest. It is the general policy of NYCT to provide additional bus service where demand warrants it, taking into account financial and operational constraints. Based on NYCT's ongoing passenger monitoring program, and as new development occurs throughout the study area, NYCT would generate a comprehensive service plan to respond to specific, known needs with capital and/or operational improvements where fiscally feasible and operationally practicable. The NYCT's capital program, developed on a 5-year cycle, provides for expansion of bus services as needs are determined. Therefore, MTA expects that the Proposed Project's modest increase in bus route-specific ridership would have no adverse effect on bus service in the PSNY study area.

Therefore, MTA expects that the arriving and departing Proposed Project passengers making connections via transit would be adequately accommodated by subway and bus services in and near PSNY, without causing a significant impact to such services.

### *12.6.1.5 Pedestrians*

Pedestrian facilities around PSNY are some of the most crowded within Manhattan and conditions within PSNY are crowded as well. Although incremental pedestrian trips with the Proposed Project are expected to be roughly 1,340 trips in the AM peak hour, PSA passengers would have the expanded 33rd Street Concourse and the entirety of the new Moynihan Station for their use. Further, these trips would distribute among the various (12) entrances of PSNY, dispersing their numbers. The volumes reaching the street level would disperse even more in multiple directions, and be beneath the *CEQR Technical Manual* level of significance for analysis. As operations ramp up to full service, the increase in proposed Metro-North passengers at PSNY due to the

Proposed Project would be offset by a reduction in passengers due to ESA. MTA expects that the performance of sidewalks and crosswalks would be similar to those under existing conditions and sidewalk designs would remain ADA compliant.

## 12.6.2 Segment 2 (Hunts Point Station Area)

### *12.6.2.1 Hunts Point Station Area*

Table 12-17 depicts the incremental trips by mode at the Hunts Point Station area for the Proposed Project.

**Table 12-17. Hunts Point Station Area: Total Incremental Trips by Mode (AM Peak Hour) – Proposed Project**

| Station | Auto | Drop-off/ Pick-up | Taxi | Subway | Bus | Walk Only | TOTAL |
|---|---|---|---|---|---|---|---|
| Modal Split | 1% | 1% | 9% | 15% | 46% | 28% | **100%** |
| Incremental Trips by Mode (Total Ons and Offs) | 5 | 15 | 30 | 70 | 210 | 120 | **450** |

Source: WSP, 2020

**TRAFFIC**

Figures H-20 and H-25 in Appendix H, "Transportation," show the traffic volumes for the Proposed Project in the Hunts Point Station area and the traffic-volume increment between the No Action Alternative and Proposed Project, respectively.

Tables H-3 and H-4 in Appendix H provide the capacity analysis results for the AM and PM peak hours, respectively, which includes LOS, v/c ratio, and average delays for all conditions.

With the Proposed Project during the AM and PM peak hours, the total numbers of movements and intersections that would operate at unacceptable LOS E or F would remain the same, as compared to the No Action Alternative.

The Proposed Project would not result in an increment of more than two seconds of delay at any of the analyzed intersections, compared with the No Action Alternative. Therefore, the projected increase in traffic demand with the Proposed Project would not result in any adverse impacts of traffic conditions in the Hunts Point Station area.

**PARKING**

The Proposed Project would not add new parking spaces at or near the proposed Hunts Point Station. Project-generated auto trips would be limited and most of the auto trips would be made by taxi and car service (Table 12-17). As shown in Table 12-18, the Proposed Project would generate a net increase in parking demand of about 10 spaces in the Hunts Point Station area during the AM peak period. This small increase in parking demand would have not adversely affect parking in the Hunts Point Station area.

Table 12-18 summarizes the projected AM peak-period incremental parking demand in the study area.

**Table 12-18. Hunts Point Station Area Incremental Parking Demand Projections in the AM Peak Period – Proposed Project**

| In (Driving to Station) | Out (Leaving Station) | Total | Net (In-Out) Parking Demand |
|---|---|---|---|
| 5 | 0 | 5 | 5 |

Source: WSP, 2018

**TRANSIT**

The Proposed Project would generate about 210 bus trips and 70 subway trips at the Hunts Point Station during the AM peak hour (Table 12-19). The modest increases in subway and bus trips could be accommodated by the extensive subway and/or bus services serving the study area. However, if any capacity or service deficiencies occur due to future growth in the study area, NYCT would address them in the course of its ongoing systemwide planning and programming of service improvements and modifications. Therefore, the Proposed Project would result in no adverse impact to transit services in the station area.

**PEDESTRIANS**

Pedestrian facilities around the proposed Hunts Point Station area are already ADA compliant and would have adequate capacity in the Proposed Project. Passengers using the station would take stairs or ADA-compliant elevators via an overpass to/from Sheridan Boulevard. MTA expects incremental pedestrian trips to be roughly 120 trips in the AM peak hour. These trips would distribute to the eastern sidewalk of Hunts Point Avenue (via Sheridan Boulevard) in both directions, but primarily to the north (heading to the No. 6 subway or Southern Boulevard commercial district). The volumes would be beneath the *CEQR Technical Manual* threshold for detailed analysis. MTA expects that the LOS would be similar to the No Action Alternative.

## 12.6.3 Segment 3 (Parkchester-Van Nest, Morris Park, and Co-op City Station Areas)

### *12.6.3.1 Parkchester-Van Nest Station Area*

Table 12-19 depicts the incremental trips by mode at the Parkchester-Van Nest Station area for the Proposed Project.

**Table 12-19. Parkchester-Van Nest Station Area: Total Incremental Trips by Mode (AM Peak Hour) – Proposed Project**

| Station | Auto | Drop-off/ Pick-up | Taxi | Subway | Bus | Walk Only | Total |
|---|---|---|---|---|---|---|---|
| Modal Split | 2% | 3% | 5% | 0% | 40% | 50% | **100%** |
| Incremental Trips by Mode (Total Ons and Offs) | 10 | 20 | 25 | 0 | 210 | 265 | **530** |

Source: WSP, 2020

**TRAFFIC**

Figure H-21 of Appendix H "Transportation," presents traffic volumes for the Parkchester-Van Nest Station area intersections and movements for the Proposed Project, and Figure H-26 for the increment between the No Action Alternative and the Proposed Project.

Tables H-5 and H-6 in Appendix H provide the capacity analysis results for the AM and PM peak hours, respectively, which includes LOS, v/c ratio, and average delays for all conditions.

Two movements that operate at LOS E or F in the AM peak hour with the No Action Alternative would continue to do so with the Proposed Project. Similarly, in the PM peak hour, five movements that operate at

LOS E or F with the No Action Alternative would continue to do so with the Proposed Project. One additional movement would operate at LOS E (East Tremont Avenue westbound at Unionport Road in the AM, White Plains Road northbound at East Tremont Avenue in the PM) for both periods with the Proposed Project compared to the No Action Alternative. For the overall intersections, all the analyzed intersections that currently operate at LOS D during the AM would continue to do so with the No Action Alternative and the Proposed Project. The intersection of White Plains Road at East Tremont Avenue would degrade from LOS D to LOS E during the PM peak hour with the Proposed Project.

While one intersection would operate at LOS E during one time period, the projected increase in traffic demand with the Proposed Project would not result in any adverse traffic impacts in the Parkchester-Van Nest Station area.

**PARKING**

The Proposed Project would not add parking spaces at or near the proposed Parkchester-Van Nest Station. Project-generated auto trips would be limited and most of the auto trips would be made by taxi and car service (Table 12-19). As shown in Table 12-20, the Proposed Project would generate a net increase in parking demand of about 10 spaces in the Parkchester-Van Nest Station area during the AM peak period.

**Table 12-20. Parkchester-Van Nest Station Area Incremental Parking Demand Projections in the AM Peak Period – Proposed Project**

| In (Driving to Station) | Out (Leaving Station) | Total | Net (In-Out) Parking Demand |
|---|---|---|---|
| 10 | 0 | 10 | 10 |

Source: WSP, 2018

The Proposed Project would reduce the number of parking spaces near the proposed Parkchester-Van Nest Station, where MTA would construct the replacement Van Nest AC Substation within an existing, privately owned surface parking lot on East Tremont Avenue. Multiple parking garages and lots throughout the neighborhood could accommodate the displaced parking spaces. This small increase in parking demand and decrease in supply would not adversely affect parking in the Parkchester-Van Nest Station area.

**TRANSIT**

The Proposed Project would generate about 210 bus trips at the Parkchester-Van Nest Station (Table 12-19). The five existing local bus routes in the station area could accommodate this modest increase in bus trips. However, if any capacity or service deficiency occurs due to future growth in the station area, NYCT would address them during its ongoing systemwide planning and programming of service improvements and modifications. Therefore, the Proposed Project would not result in any adverse impacts to transit service in the study area.

**PEDESTRIANS**

Pedestrian facilities around the proposed Parkchester-Van Nest Station area are already ADA compliant and would have adequate capacity in the Proposed Project. Passengers using the station would take stairs or ADA-compliant elevators via an overpass to/from East Tremont Avenue. Incremental pedestrian trips are expected to be roughly 265 trips in the AM peak hour. These trips would distribute to the northern sidewalk of East Tremont Avenue, primarily to the west (heading to the corner of Unionport Road to either cross to the Parkchester community or cross the bridge to the Van Nest community). This volume is beneath the *CEQR*

*Technical Manual* threshold for detailed analysis. MTA expects that the LOS would be similar to the No Action Alternative.

### *12.6.3.2 Morris Park Station Area*

Table 12-21 depicts the incremental trips by mode at the Morris Park Station area for the Proposed Project.

**Table 12-21. Morris Park Station Area: Proposed Project Total Incremental Trips by Mode (AM Peak Hour)**

| Station | Auto | Drop-off/ Pick-up | Taxi | Subway | Bus | Walk Only | Total |
|---|---|---|---|---|---|---|---|
| Modal Split | 1% | 2% | 7% | 0% | 47% | 43% | **100%** |
| Incremental Trips by Mode (Total Ons and Offs) | 5 | 15 | 40 | 0 | 285 | 275 | **620** |

Source: WSP, 2020

**TRAFFIC**

Appendix H "Transportation," Figure H-22 and Figure H-27 present the proposed Morris Park Station area traffic volumes at intersections and for movements, respectively, for the increment between the No Action Alternative and the Proposed Project.

Tables H-7 and H-8 in Appendix H provide the capacity analysis results for the AM and PM peak hours, respectively, which includes LOS, v/c ratio, and average delays for all conditions.

For the overall intersections, all the analyzed movements and intersections that currently operate at LOS D during the PM peak hours would continue to do so with the Proposed Project. While all movements that will operate at LOS D or better during the AM peak hours in the No Action Alternative would continue to do so with the Proposed Project, one additional intersection would operate at LOS E or F compared to the No Action Alternative. The intersection of Pelham Parkway South and Eastchester Road would degrade from LOS D to LOS E with the Proposed Project in the AM peak hour. The intersection of Morris Park Avenue and Eastchester Road would degrade from LOS E in the No Action Alternative to LOS F with Proposed Project, with an increase in delay of more than 10 seconds. Overall, the projected increase in traffic demand with the Proposed Project would not result in any adverse traffic impacts in the Morris Park Station area.

**PARKING**

The Proposed Project would not add new parking spaces at or near the proposed Morris Park Station site. Project-generated auto trips would be limited and most of the auto trips would be made by taxi and car service (Table 12-21). As shown in Table 12-22, the Proposed Project would result in an increase in parking demand of about 5 spaces in the Morris Park Station area during the AM peak period. This small increase in parking demand would not result in an adverse parking impact in the Morris Park Station area.

**Table 12-22. Morris Park Station Area Incremental Parking Demand Projections in the AM Peak – Proposed Project**

| In (Driving to Station) | Out (Leaving Station) | Total | Net (In-Out) Parking Demand |
|---|---|---|---|
| 5 | 0 | 5 | 5 |

Source: WSP, 2018

**TRANSIT**

The Proposed Project would generate about 285 bus trips at the proposed Morris Park Station area (Table 12-21). This modest increase in bus trips could be accommodated by the two existing local and one express bus routes in the station area. However, if any capacity or service deficiencies occur due to future growth in the station area, the NYCT would address them during its ongoing systemwide planning and programming of service improvements and modifications. Therefore, the Proposed Project would not adversely affect transit services in the study area.

**PEDESTRIANS**

Pedestrian facilities around the proposed Morris Park Station area would adhere to ADA regulations and have adequate capacity in the Proposed Project. Passengers using the station would take stairs or ADA-compliant elevators via an overpass to/from Basset Road or Basset Avenue. MTA expects incremental pedestrian trips to be roughly 275 trips in the AM peak hour. These trips would distribute north and south of the station, to the crosswalk leading to Morris Park Avenue from the north side of the station, and to the northern sidewalk of Basset Road from the south side of the proposed station. On the north side, pedestrians would head primarily to the nearby medical centers, dispersing farther along Eastchester Road. On the south side, pedestrians would head primarily to the various portions of the Hutchinson Metro Center to the south and east. These volumes are beneath the *CEQR Technical Manual* threshold for detailed analysis. MTA expects that the LOS on facilities would be similar to the No Action Alternative.

### *12.6.3.3 Co-op City Station Area*

Table 12-23 depicts the incremental trips by mode at the Co-op City Station area for the Proposed Project.

**Table 12-23. Co-op City Station Area: Proposed Project Total Incremental Trips by Mode (AM Peak Hour)**

| Station | Auto | Drop-off/ Pick-up | Taxi | Subway | Bus | Walk Only | Total |
|---|---|---|---|---|---|---|---|
| Modal Split | 4% | 6% | 8% | 0% | 45% | 37% | **100%** |
| Incremental Trips by Mode (Total Ons and Offs) | 20 | 35 | 50 | 0 | 245 | 200 | **550** |

Source: WSP, 2018

**TRAFFIC**

Appendix H, "Transportation" Figure H-23 and Figure H-28 present the proposed Co-op City Station area traffic volumes at intersections and for movements, respectively, for the increment between the No Action Alternative and the Proposed Project.

Tables H-9 and H-10 in Appendix H provide the capacity analysis results for the AM and PM peak hours, respectively, which includes LOS, v/c ratio, and average delays for all conditions.

The movements at the seven intersections in the Co-op City Station area operating at LOS D or better during the AM and PM peak hours would continue to do so with the Proposed Project. For the overall intersections, the analyzed intersections would operate at LOS A or B during both the AM and PM peak hours for the three analyzed conditions. Therefore, the projected increase in traffic demand with the Proposed Project would not result in any traffic impacts in the Co-op City Station area.

**PARKING**

The Proposed Project would not add parking spaces at or near the proposed Co-op City Station area. Project-generated auto trips would be limited and most of the auto trips would be made by taxi and for-hire service (Table 12-23). As shown in Table 12-24, the Proposed Project would generate an increase in parking demand of about 20 spaces in the Co-op City Station area during the AM peak period. Since existing on-street parking utilization is low, MTA expects that the existing parking supply would be sufficient to accommodate the small increase in parking demand with the Proposed Project. Further, as users of this station are principally expected to be Co-op City residents, they could utilize the existing residents-only parking structure nearby. Therefore, the Proposed Project would not adversely affect parking in the Co-op City Station area.

**Table 12-24. Co-op City Station Area Incremental Parking Demand Projections in the AM Peak Period – Proposed Project**

| In (Driving to Station) | Out (Leaving Station) | Total | Net (In-Out) Parking Demand |
|---|---|---|---|
| 20 | 0 | 20 | 20 |

Source: WSP, 2018

**TRANSIT**

Approximately 45 percent of passengers arriving at or departing from the proposed Co-op City Station would use the extensive network of bus routes that pass directly by the proposed station area. The Proposed Project would generate about 245 bus trips at the Co-op City Station site (Table 12-23). The extensive existing bus services could accommodate this modest increase in bus trips. In addition, the NYCT has stated that the four bus routes currently terminating at Earhart Lane could be modified to provide better transfer connection adjacent to the new Co-op City Station;[2] the NYCT would define and implement such modifications during later project development phases. However, if any capacity or service deficiencies occur due to future growth in the station area, NYCT would address them in the course of its ongoing systemwide planning and programming of service improvements and modifications. Therefore, the Proposed Project would not result in any adverse impacts to transit services in the study area.

**PEDESTRIANS**

The Proposed Project would adhere to ADA regulations and provide adequate capacity for pedestrian facilities around the proposed Co-op City Station area. Passengers using the station would take stairs or ADA-compliant elevators via an overpass to/from Erskine Place. MTA expects incremental pedestrian trips to be roughly 200 trips in the AM peak hour. These trips would distribute north of the station, to the crosswalk leading to De Reimer Avenue or to the sidewalk along the north side of Erskine Place. These trips would disperse farther along the intersecting neighborhood roadways leading farther into Co-op City. The pedestrian volume is beneath the *CEQR Technical Manual* threshold for detailed analysis. MTA expects that the LOS on pedestrian facilities would be similar to the No Action Alternative.

### 12.6.4 New Haven Line Proposed Project Rail Operations

The Proposed Project, by providing up to 102 NHL trains (24 in the peak period) to and from PSNY, would greatly increase existing Metro-North customers' access to Manhattan. Existing NHL customers' trips to Manhattan's west side are expected to decrease by as much as 45 minutes.

[2] As noted from discussions and most recently a meeting held on May 23, 2016, with Metro-North, MTA Capital Construction, and MTA bus staff.

The Proposed Project would provide residents of the East Bronx with direct rail access to Manhattan and locations along the NHL for the first time since before World War II. In some cases, people using the East Bronx stations would save over 30 minutes in their trip to Manhattan and more than 1 hour on trips to NHL communities north of the Bronx in Westchester County and Connecticut.

The operations analysis of the NHL under the Proposed Project found little or no degradation in Amtrak average speed for the 60 Amtrak trains expected to be in operation (see Appendix A, "Penn Station Access Future Build – Option J1 Network Simulation Report"). No modification to Amtrak train schedule order (at CP 216 – New Rochelle) was shown to be necessary by the simulations; however, the simulation did indicate that NHL GCT-bound schedules could include slightly longer train headways (i.e., the average time interval between trains), due to the diversion of some peak GCT-bound trains to PSNY. Nevertheless, passengers would have additional choices for making their trip into Manhattan and an additional pathway into Manhattan in the unlikely event of an emergency on the route to GCT.

MTA analyzed operations of the NHL segment (56.6 miles) for the baseline (2016), No Action Alternative, and Proposed Project in its ability to handle the additional service load. Table 12-25 and Table 12-26 summarize the findings as delay minutes per 100 train-miles for 24-hour and AM peak periods, respectively. The analysis found that there would be negligible increase in delay (i.e., less than 30 seconds over 100 miles) under the Proposed Action and less than one minute increase in delay over the segment for a given operator and service between the No Action Alternative and the Proposed Project.

### Table 12-25. New Haven Line Weekday (24 hours) Service – Baseline, No Action Alternative, and Proposed Project

| Operator and Service | Baseline (2016) | | | No Action Alternative | | | Proposed Project | | | Change in Delay-Minutes per Segment (No Action Alternative to Proposed Project) |
|---|---|---|---|---|---|---|---|---|---|---|
| | # of Trains | Delay-Minutes / 100 Train-Miles | Delay-Minutes per Segment | # of Trains | Delay-Minutes / 100 Train-Miles | Delay-Minutes per Segment | # of Trains | Delay-Minutes / 100 Train-Miles | Delay-Minutes per Segment | |
| Amtrak Acela | 20 | 0.0 | 0.0 | 28 | 0.3 | 0.17 | 28 | 0.5 | 0.28 | 0.11 |
| Amtrak Regional | 31 | 0.0 | 0.0 | 46 | 1.2 | 0.68 | 46 | 1.4 | 0.79 | 0.11 |
| Metro-North to PSNY | — | — | — | — | — | — | 101 | 2.9 | 1.64 | — |
| Metro-North to GCT | 252 | 0.9 | 0.51 | 252 | 1.0 | 0.57 | 252 | 1.3 | 0.74 | 0.17 |
| LIRR | — | — | — | — | — | — | — | — | — | — |

Source: Gannett Fleming, 2021

— Not Applicable

* LIRR train timetable was different for each of the simulation cases. LIRR requested using a more refined proforma train timetable for the Proposed Project.

### Table 12-26. New Haven Line AM Peak (6:00-10:00 AM) Service – Baseline, No Action Alternative, and Proposed Project

| Operator and Service | Baseline (2016) | | | No Action Alternative | | | Proposed Project | | | Change in Delay-Minutes per Segment (No Action Alternative to Proposed Project) |
|---|---|---|---|---|---|---|---|---|---|---|
| | # of Trains | Delay-Minutes / 100 Train-Miles | Delay-Minutes per Segment | # of Trains | Delay-Minutes / 100 Train-Miles | Delay-Minutes per Segment | # of Trains | Delay-Minutes / 100 Train-Miles | Delay-Minutes per Segment | |
| Amtrak Acela | 6 | 0.0 | 0.0 | 8 | 0.3 | 0.17 | 8 | 0.3 | 0.17 | 0.00 |
| Amtrak Regional | 6 | 0.0 | 0.0 | 11 | 1.0 | 0.57 | 11 | 2.7 | 1.53 | 0.96 |
| Metro-North to PSNY | — | — | — | — | — | — | 24 | 2.4 | 1.36 | — |
| Metro-North to GCT | 68 | 1.2 | 0.68 | 68 | 1.0 | 0.57 | 68 | 1.9 | 1.08 | 0.51 |
| LIRR | — | — | — | — | — | — | — | — | — | — |

Source: Gannett Fleming, 2021

— Not Applicable

* LIRR train timetable was different for each of the simulation cases. LIRR requested using a more refined proforma train timetable for the Proposed Project.

### 12.6.5 Hell Gate Line Proposed Project Rail Operations

Table 12-27 shows the number of weekday trains expected in operation with implementation of the full service plan under the Proposed Project.

**Table 12-27. Hell Gate Line Weekday Service – Existing, No Action Alternative, and Proposed Project**

| Weekday Trains | Amtrak | Metro-North | CSX (freight) | TOTAL |
|---|---|---|---|---|
| Existing | 42 | 0 | 2 | **44** |
| No Action Alternative | 60 | 0 | 3 | **63** |
| Proposed Project | 60 | 102 | 3 | **165** |

Source: MTA, 2018

MTA analyzed operations of the HGL segment (13.8 miles) for the baseline (2016), No Action Alternative, and Proposed Project in its ability to handle the additional service load. Table 12-28 and Table 12-29 summarize the findings as delay minutes per 100 train-miles for 24-hour and AM peak periods, respectively. On the HGL, PSA trains would hold for Amtrak trains when merging from three/four-track territory to two-track territory on the line, contributing to incurred PSA signal delay. Three Amtrak trains incurred minor delay while physically still on the HGL when merging onto the NHL at CP-216 in simulation, and due to minor train schedule timing when an Amtrak train followed in the wake of a PSA train onto the HGL at Gate Interlocking and an overtake was not intended by the timetabling. Between the No Action Alternative and the Proposed Project, the increase in delay over the segment for a given operator and service would be less than one minute. Most of these minor delays could be remediated by making small modifications to Amtrak or PSA train schedules, which is a normal step in the timetable development process.

### Table 12-28. Hell Gate Line Weekday (24 hours) Service – Baseline, No Action Alternative, and Proposed Project

| Operator and Service | Baseline (2016) | | | No Action Alternative | | | Proposed Project | | | Change in Delay-Minutes per Segment (No Action Alternative to Proposed Project) |
|---|---|---|---|---|---|---|---|---|---|---|
| | # of Trains | Delay-Minutes / 100 Train-Miles | Delay-Minutes per Segment | # of Trains | Delay-Minutes / 100 Train-Miles | Delay-Minutes per Segment | # of Trains | Delay-Minutes / 100 Train-Miles | Delay-Minutes per Segment | |
| Amtrak Acela | 20 | 0.1 | 0.01 | 28 | 0.5 | 0.07 | 28 | 3.7 | 0.51 | 0.44 |
| Amtrak Regional | 23 | 0.8 | 0.11 | 32 | 0.9 | 0.12 | 32 | 5.5 | 0.76 | 0.64 |
| Metro-North to PSNY | — | — | — | — | — | — | 101 | 2.5 | 0.35 | — |
| Metro-North to GCT | — | — | — | — | — | — | — | — | — | — |
| LIRR | — | — | — | — | — | — | — | — | — | — |

Source: Gannett Fleming, 2021

— Not Applicable

* LIRR train timetable was different for each of the simulation cases. LIRR requested using a more refined proforma train timetable for the Proposed Project.

### Table 12-29. Hell Gate Line AM Peak (6:00-10:00 AM) Service – Baseline, No Action Alternative, and Proposed Project

| Operator and Service | Baseline (2016) | | | No Action Alternative | | | Proposed Project | | | Change in Delay-Minutes per Segment (No Action Alternative to Proposed Project) |
|---|---|---|---|---|---|---|---|---|---|---|
| | # of Trains | Delay-Minutes / 100 Train-Miles | Delay-Minutes per Segment | # of Trains | Delay-Minutes / 100 Train-Miles | Delay-Minutes per Segment | # of Trains | Delay-Minutes / 100 Train-Miles | Delay-Minutes per Segment | |
| Amtrak Acela | 6 | 0.0 | 0.0 | 8 | 0.6 | 0.08 | 8 | 5.4 | 0.75 | 0.67 |
| Amtrak Regional | 4 | 0.2 | 0.03 | 8 | 1.6 | 0.22 | 8 | 5.3 | 0.73 | 0.51 |
| Metro-North to PSNY | — | — | — | — | — | — | 24 | 1.9 | 0.26 | — |
| Metro-North to GCT | — | — | — | — | — | — | — | — | — | — |
| LIRR | — | — | — | — | — | — | — | — | — | — |

Source: Gannett Fleming, 2021

— Not Applicable

* LIRR train timetable was different for each of the simulation cases. LIRR requested using a more refined proforma train timetable for the Proposed Project.

In addition, MTA analyzed operations of the HGL under the Proposed Project for the different HGL alignment options described in Chapter 2 in their ability to handle the additional service load under varying conditions (delay scenarios). Refer to Appendix A, "Penn Station Access Future Build – Option J1 Network Simulation Report," for more detail. Table 12-30 summarizes the findings of the analysis.

**Table 12-30. Alignment Options Simulation Results**

| Number of Passenger Tracks | | | | |
|---|---|---|---|---|
| **Hunts Point** | **Parkchester-Van Nest, Morris Park, & Co-op City** | **Platform Configuration** | **Ability to Recover from Delay Event** | **Impacts to Amtrak Operations?** |
| 2 | 4 | Center Island | Poor | Yes – Hunts Point |
| 2 | 3 | Center Island and Side | Very Poor | Yes – Hunts Point |
| **3** | **4** | **Center Island** | **Fair** | **Negligible** |
| 3 | 3 | Center Island and Side | Fair | Minor |
| 4 | 4 | Center Island | Fair | Negligible |

The operations simulations indicate the Proposed Project's alignment performs better or comparable to the other alignment options. The Proposed Project would provide Amtrak with additional tracks through the HGL where stations are proposed, and the ability to overtake Metro-North trains that are stopped at stations. The speeds of operations on the HGL would remain relatively the same as existing operations, with an incremental improvement in average speed for Amtrak trains. Further, the operations analysis showed that in delayed conditions, the Proposed Project would allow for Amtrak trains to more easily recover from delays than they do currently. As stated in the MOU between MTA and Amtrak (see Appendix E, "Agency Correspondence and Public Involvement"), intercity service cannot be impacted by PSA service. MTA will perform operations analyses near construction completion to optimize Metro-North's service plan and to demonstrate no impact to intercity service.

## 12.7 CONCLUSION

Intersections in the vicinities of PSNY and the four stations proposed in the eastern Bronx would operate at the same levels of service with the No Action Alternative and the Proposed Project, with only four exceptions (Eighth Avenue at West 33rd Street, White Plains Road at East Tremont Avenue, Pelham Parkway South at Eastchester Road, and Morris Park Avenue at Eastchester Road). While the Proposed Project would result in an increase of more than 10 seconds of delay at only two intersections analyzed (Eighth Avenue at West 33rd Street in the PM, and Morris Park Avenue at Eastchester Road in the AM), compared to the No Action Alternative, overall traffic increases with the Proposed Project would not result in an adverse traffic impact in the study areas.

MTA expects no new parking demand in the PSNY study area with the Proposed Project because auto trips would continue to be principally by taxi and car services. In the proposed Bronx stations' study areas, the existing parking supply would accommodate the small increase in parking demand resulting from the Proposed Project and the small decrease in parking spaces from constructing the Van Nest AC Substation within an existing surface parking lot. At stations north of the Bronx, where parking is primarily owned and operated by the towns or counties, any increased parking demand would be addressed by local municipalities through

additional parking structures or by encouraging alternative modes of transportation to the stations. Therefore, the Proposed Project would not adversely affect parking conditions in the five station areas.

With the proposed PSA service, ridership is forecast to increase on the Seventh Avenue and Eighth Avenue subway lines in PSNY and on the five bus routes serving the PSNY area. However, subway and bus services in and near PSNY would adequately accommodate arriving and departing Metro-North passengers making connections via transit in the peak hours with no adverse impact to such services. At the proposed Bronx stations, bus and subway services operating in the stations' vicinities would adequately accommodate increases in bus and subway trips with the Proposed Project, because the additional trips would be dispersed over several routes and in two directions at each new station. The NYCT would address any potential capacity or service deficiencies that could result with the Proposed Project in its systemwide planning and programming of service improvements and modifications.

Amtrak trains would experience little or no degradation in average speed on the NHL and the Amtrak train schedule order would not be modified under the Proposed Project, with the potential for slightly longer train headways. On the HGL Corridor, the additional tracks and the ability to overtake Metro-North trains that are stopped at stations provided by the Proposed Project would benefit Amtrak intercity passenger service. Existing speeds of operations for Amtrak trains would be maintained and in delayed conditions, the Proposed Project would allow for Amtrak trains to more easily recover from delays than they do currently. While CSX operations would need to change slightly, the additional track flexibility would largely improve overall rail operations for the area (commuter, intercity passenger, and freight).

Lastly, MTA expects no pedestrian-related impacts for sidewalks surrounding the proposed stations, because the additional pedestrian trips to/from the proposed stations would be dispersed over multiple blocks at each location.