

6.1 INTRODUCTION

This chapter summarizes the displacement and relocation impacts previously identified in the 2004 FEIS and then evaluates the residential and commercial displacement that would be required for the Modified Design.

As described in Chapter 2, “Description of Phase 2 Modified Design,” the Modified Design includes relocation or change in size of some entrances and ancillary facilities for Phase 2 due to changes in background conditions and advanced preliminary engineering. As discussed in Chapter 1, “Project Overview,” selection of new sites for entrances and ancillary facilities has followed the established overall siting criteria for the Second Avenue Subway Project and been conducted in accordance with the purpose and need, and goals and objectives of the Project.

The 2004 FEIS concluded that potential significant adverse impacts would occur during construction due to the possible need for temporary but long-term (up to 12 months) displacements during construction. It also concluded that significant adverse impacts would occur because of permanent property acquisitions required for the Project’s new subway entrances and ancillary facilities and the permanent displacements that would occur as a result. This would be the same with the Modified Design. However, the Modified Design may reduce or avoid the temporary displacements during construction, pending further engineering analysis. With respect to permanent impacts, the Modified Design would result in the need for additional displacements and relocations as compared to the 2004 FEIS Design. These displacements would be similar in nature and extent as those required for the 2004 FEIS Design, and compensation and relocations would be conducted in accordance with the federal Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970 (Uniform Act) and New York State Eminent Domain Procedure Law (EDPL), as described in the 2004 FEIS.

6.2 FEIS FINDINGS

6.2.1 CONSTRUCTION IMPACTS

The 2004 FEIS discusses the possible residential and business displacement and relocation that could be required for the full 8.5-mile-long Second Avenue Subway in FEIS Chapter 8, “Displacement and Relocation.” It stated that the new subway was designed to follow the public right-of-way of city streets so as to minimize the need to disrupt use of private property or to acquire private property for the Project, but even so, some property acquisition would be required. The 2004 FEIS stated that information on property impacts was based on the preliminary engineering conducted at that time and would be further evaluated as the design developed; it also noted that while the final locations of properties to be acquired may shift during continuing design and engineering, the nature and extent of impacts that would result would be similar.

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As described in the 2004 FEIS, construction of the Second Avenue Subway would require some short-term access limitations during construction as well as possible longer term displacement for construction activities.

The 2004 FEIS said that throughout most of the alignment, access would be maintained to residential and commercial buildings and retail businesses at all times, but in limited areas, there could be temporary disruption to access to protect public safety or where access to building entrances may be blocked during construction. As stated in the 2004 FEIS, this would generally occur for only a few hours at a time, but in a few instances, disruptions could extend for up to 6 months. The 2004 FEIS also noted that disruptions to access would be most likely for locations in close proximity to the subway construction, where measures to support and protect existing structures would be implemented (such as grouting, underpinning, and the installation of internal bracing or star bolts). In some of these locations, construction might also need to occur within basements of some buildings, or potentially within other portions of the buildings' interiors. In addition, for buildings with access to basements through doors in the sidewalk that are adjacent to cut-and-cover activity, access to those doors would also be restricted at times.

The 2004 FEIS Design required possible temporary but long-term displacement for occupants of buildings at the southwest corner of Second Avenue and 125th Street, where the curved tunnel would be excavated beneath the buildings. In this area, the 2004 FEIS described that nine occupied buildings could be temporarily affected for up to 12 months. The 2004 FEIS estimated that a total of 107 apartments with 278 residents would be affected, as well as an estimated 10 ground-floor businesses, a religious facility, and a commercial printer (with an estimated total of 35 employees in all of those businesses). The buildings would not have been demolished, but the occupants might have been relocated to other spaces for up to 12 months to avoid extensive disruption during construction. In addition, the 2004 FEIS Design would also have used a vacant lot on Second Avenue and a two-story building on 125th Street with an auto repair business on the ground floor and residential apartments (estimated to have eight apartments with 21 total residents) as construction staging sites for the curved tunnel. This would have required demolition of the occupied building.

In addition, the 2004 FEIS noted that some properties would be acquired permanently, to serve as the sites of subway components such as stations or ancillary facilities. While this would be a permanent effect of the Project rather than a temporary, construction-related effect, the displacement and acquisition would occur prior to or during the construction period, to allow the new elements to be built (see Section 6.2.2 for the discussion of permanent displacement for the 2004 FEIS Design).

The 2004 FEIS stated that the Project would also require permanent below-ground easements beneath private property in a number of locations for new subway tunnels and other subway-related facilities (including stations), or to provide necessary structural support during excavation. In some cases, these easements would be within the building's basement or foundation, potentially resulting in a direct effect to the structure.

The 2004 FEIS also noted that temporary subsurface easements would be needed beneath a number of properties throughout the alignment to install rock bolts, but that these would have no structural effects on buildings or affect property owners' use of the sites.

For all displacement, whether temporary or permanent, the 2004 FEIS stated that MTA and NYCT would provide compensation and relocation assistance for owner-occupants or tenants needing to

be relocated in accordance with applicable legal procedures and federal guidelines. The 2004 FEIS stated that for any locations where it would not be feasible for the Project to maintain reasonable access to businesses, MTA would compensate the landlords for diminution of rental value and, where applicable, provide relocation payments to displaced tenants. Residents temporarily displaced would have been offered alternative accommodations or some equivalent measure of compensation. The 2004 FEIS stated that compensation and displacements would be conducted in accordance with the New York State Eminent Domain Procedure Law (EDPL) and the federal Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970 (Uniform Act).

6.2.2 PERMANENT IMPACTS

The 2004 FEIS described that easements and property acquisitions would be required at each new station to accommodate the Second Avenue Subway's new station entrances, ancillary facilities, and emergency exits. The 2004 FEIS described the potential size, shape, and design concepts for the new station entrances and ancillary facilities, while noting that the specific design of these features were still being developed and were subject to change. The 2004 FEIS described that the specific location of station entrances would depend on anticipated passenger demand, so that larger entrances could be located where higher ridership demand was expected; proximity to bus transfers; maximizing geographic distribution of station entrances along the alignment; and minimizing environmental impacts related to the station entrances and ancillary facilities.

Chapter 8 of the 2004 FEIS, "Displacement and Relocation," presented a preliminary list of the specific properties identified for station entrances and ancillary facilities and noted that "These locations are not final; it is possible that some will shift during continuing engineering from their currently proposed locations to other similar locations in the same vicinity, and/or that additional, similar properties could be required." The 2004 FEIS also stated that "Affected property owners will be notified during final design after plans have been confirmed" (FEIS page 8-8).

The 2004 FEIS identified 12 full property acquisitions and 4 partial property acquisitions associated with the proposed 106th Street, 116th Street, and 125th Street Stations for new entrances, ancillary facilities, and emergency exits. Using standard factors of employees per square foot for each type of business and residential occupancy rates from the 2000 Census, the 2004 FEIS estimated that these acquisitions would result in displacement of approximately 14,000 square feet of commercial space with about 42 employees, and displacement of 12 residential units with about 36 residents, as shown in **Table 6-1**. As discussed above in Section 6.2.1, the 2004 FEIS also identified acquisition of two sites at the 125th Street curve to be used for construction staging. While the acquisitions were to be temporary, one building containing auto-related facilities and second-floor residences was anticipated to be demolished, and would thereby have displaced two businesses with an estimated 21 employees and eight residences with an estimated 21 residents. In addition, the 2004 FEIS stated that new subway stations elements created by cut-and-cover construction could require permanent use of the area beneath the sidewalk, potentially curtailing use of that area by existing buildings for vault space or cellar doors.

Chapter 8 of the 2004 FEIS also described the process MTA used to identify the preliminary locations for station entrances and ancillary facilities for the 2004 FEIS Design (see FEIS page 8-8). As discussed there and summarized in Chapter 2 of this Supplemental EA, "Description of Phase 2 Modified Design," sites for station entrances and ancillary facilities were selected to limit the need for displacement of residents or businesses where possible, by choosing potential

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easements in existing or planned buildings, vacant lots and buildings, plazas and arcades, and open areas before occupied buildings. Priority was given to acquisition of vacant or underutilized sites and structures, to the extent practicable. The 2004 FEIS stated that property acquisitions and displacements would be conducted in accordance with the EDPL and the Uniform Act of 1970.

The 2004 FEIS identified permanent subsurface easements beneath 11 private properties at the 125th Street curve where the tunnel would be located below private properties, which would not result in any permanent displacements (see discussion in Section 6.2.1 for potential temporary displacements during construction). In addition, the 2004 FEIS identified a ventilation/emergency egress structure for the potential 129th Street storage tracks to be constructed in an easement near Second Avenue and 127th Street.

The 2004 FEIS noted that specific locations of acquisitions could change because the design of the station areas was not yet finalized at that time and new development was expected to occur. The 2004 FEIS noted that if the proposed locations of any of the permanent subway facilities (i.e., entrances and ancillary facilities) were to shift, the nature and extent of impacts would be similar.

The 2004 FEIS identified the potential temporary but long-term displacements at the 125th Street curve, the acquisition for the construction staging sites at the curve, and the permanent acquisitions along the full alignment as significant adverse impacts, but stated that businesses and property owners would be compensated according to the EDPL and Uniform Act.

**Table 6-1
Preliminary List of Private Properties to be Acquired for Phase 2 Permanent Project Elements for the 2004 FEIS Design**

Block	Lot	Address	Approximate Location	Current Use	Estimated Commercial Displacement (Square Feet)	Commercial Displacement (Full-Time Equivalent Employees) ¹	Estimated Residential Displacement (Units) ²	Estimated Residential Displacement (Residents) ²	Proposed Use	Acquisition Type ³
106th Street Station										
1681	50	2132 Second Ave	SW corner 110th Street	1-story beer ⁴ distributor	3,600	9	0	0	Ancillary facility	Full acquisition
1678	1	2080 Second Ave	SE corner 108th St	Unused building at Ben Franklin Houses	0	0	0	0	Station entrance	Partial acquisition
1678	1	2078 Second Ave	NE corner 106th St	Portion of plaza at residential building	0	0	0	0	Station entrance	Partial acquisition
1677	1	2042 Second Ave	E side Second Ave, 105th-106th Sts	Vacant lot	0	0	0	0	Ancillary facility and emergency egress	Full acquisition
1677	2	2042 Second Ave	E side Second Ave, 105th-106th Sts	Vacant lot	0	0	0	0	Ancillary facility and emergency egress	Full acquisition
1677	3	2042 Second Ave	E side Second Ave, 105th-106th Sts	Vacant lot	0	0	0	0	Ancillary facility and emergency egress	Full acquisition
Subtotal					3,600	9	0	0		
116th Street Station										
1795	2	2304 Second Ave	E side Second Ave near 118th St	Vacant land	0	0	0	0	Ancillary facility	Full acquisition
1795	3	2306 Second Ave	E side Second Ave near 118th St	Vacant land	0	0	0	0	Ancillary facility	Full acquisition
1688	1	2262 Second Ave	NE corner 116th St	Vacant 5-story residential with ground-floor retail	1,196	3	6	18	Station entrance, ancillary facility and emergency egress	Full acquisition
1688	1	301 E. 116th St	N side 116th St, Second-First Aves	1-story retail	1,196	3	0	0	Station entrance and ancillary facility	Full acquisition
1688	2	307 E. 116th St	N side 116th St, Second-First Aves	Vacant land	0	0	0	0	Station entrance and ancillary facility	Full acquisition
1687	51	2254 Second Ave	SE corner 116th St	4-story residential with ground-floor barber shop	1,020	3	3	9	Ancillary facility	Full acquisition
1687	151	2252 Second Ave	SE corner 116th St	4-story residential with ground-floor discount store	1,020	3	3	9	Ancillary facility	Full acquisition
Subtotal					4,432	12	12	36		

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Table 6-1 (Cont'd)

Preliminary List of Private Properties to be Acquired for Phase 2 Permanent Project Elements for the 2004 FEIS Design

Block	Lot	Address	Approximate Location	Current Use	Estimated Commercial Displacement (Square Feet)	Commercial Displacement (Full-Time Equivalent Employees) ¹	Estimated Residential Displacement (Units) ²	Estimated Residential Displacement (Residents) ²	Proposed Use	Acquisition Type ³
125th Street Station										
1773	57	132 E. 125th St	SW corner Lexington Ave at 125th St	2-story commercial w ground-floor pawn shop, grocery, and restaurant	6,594	21	0	0	Station entrance and ancillary facility	Full acquisition
1773	67	110 E. 125th St	S side 125th St, Park-Lexington Aves	Portion of parking lot	0	0	0	0	Ancillary facility	Partial acquisition
1789	46	2293 Third Ave	SE corner Third Ave at 125th St	Portion of vacant parcel	0	0	0	0	Ancillary facility	Partial acquisition
Subtotal					6,594	21	0	0		

Notes:

- Commercial displacement was estimated using the following rates:
Retail: 1 full-time equivalent (FTE) employee per 400 square feet (sf),
Office: 1 FTE employee per 250 sf,
Restaurant: 1 FTE employee per 200 sf,
Manufacturing: 1 FTE employee per 500 sf,
Parking: 1 FTE employee per 1,500 sf.
Vacant space was assumed to be occupied.
- Residential units represent all units in the building (including vacant units), based on New York City Department of Finance Real Property Assessment Data. Number of residents is based on the average household size for the census tract in which the station is located. When a station area falls in two census tracts, the larger of the two average household sizes was used.
- Acquisitions are considered partial when only a portion of a property must be acquired and the remaining portion would remain usable.
- This property is not available for use by the Second Avenue Subway Project, as a residential building is planned for the site. An alternate site may be more appropriate, subject to further engineering.

Source: 2004 FEIS, Table 8-1.

6.3 UPDATE OF BACKGROUND CONDITIONS

As discussed in Chapter 4, “Social and Economic Conditions,” substantial new development has occurred in East Harlem since the 2004 FEIS and more development is planned. As a result, some sites identified in the 2004 FEIS for ancillary facilities and entrances have since been developed, or are currently planned to be developed, with private development and are no longer suitable for use by the Second Avenue Subway Project, because of the size of the new or proposed private development or other features. In addition, some of the properties above the 125th Street curve have been redeveloped with new, larger buildings. Site-specific changes are described in the following sections.

6.4 PHASE 2 MODIFIED DESIGN—CHANGES IN IMPACTS

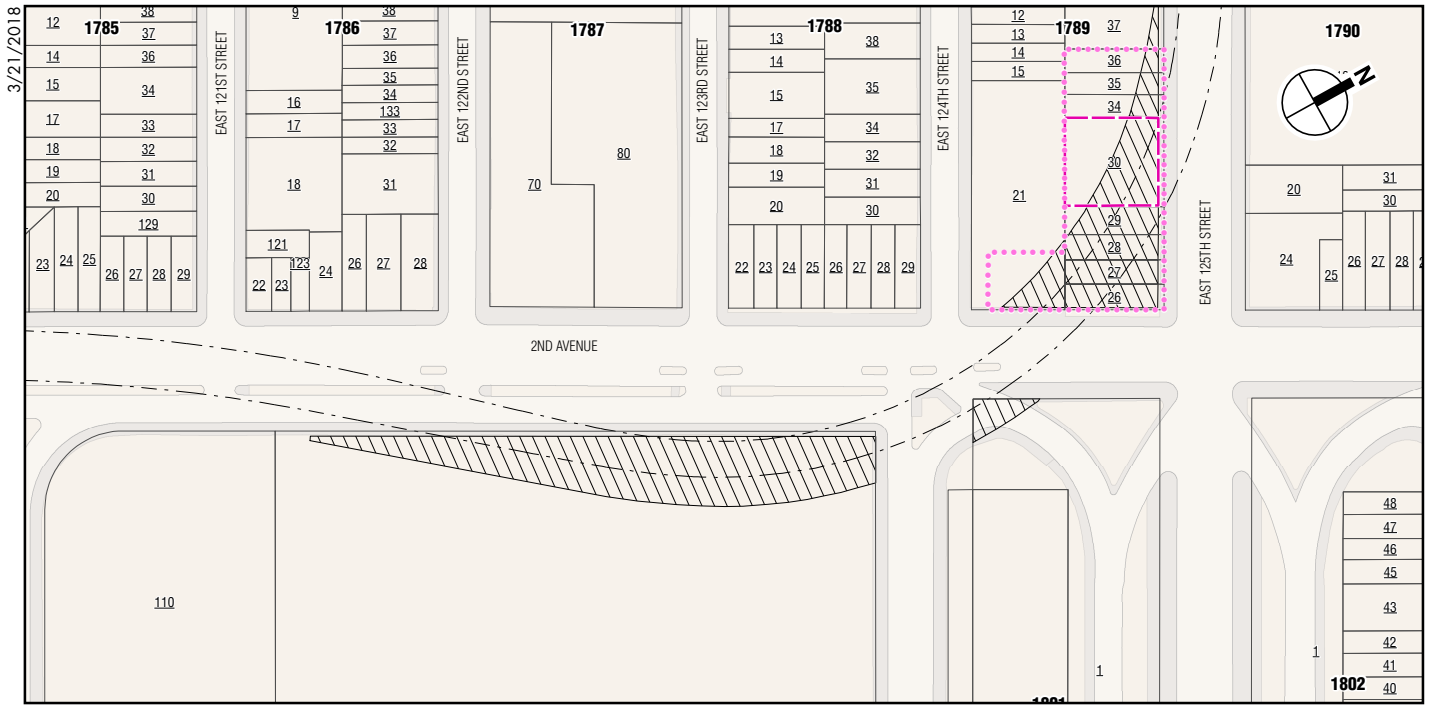
6.4.1 CONSTRUCTION IMPACTS

As with the 2004 FEIS Design, during construction of the Modified Design, construction of the Second Avenue Subway would require some short-term access limitations during construction. Access would be maintained to most residential and commercial buildings and retail businesses near the construction zone at all times, but in limited areas, there could be temporary disruption to access to protect public safety or where access to building entrances may be blocked during construction. As stated in the 2004 FEIS, this would generally occur for only a few hours at a time, but in a few instances, disruptions could extend for up to 6 months.

In addition, similar to the 2004 FEIS Design, as part of the construction of the Phase 2 alignment along 125th Street, some temporary, subgrade easements would be required for installation of rockbolts to support the tunnel wall. Once construction is complete, the easements would lapse. No temporary or permanent displacement or relocation would be required as a result of these easements.

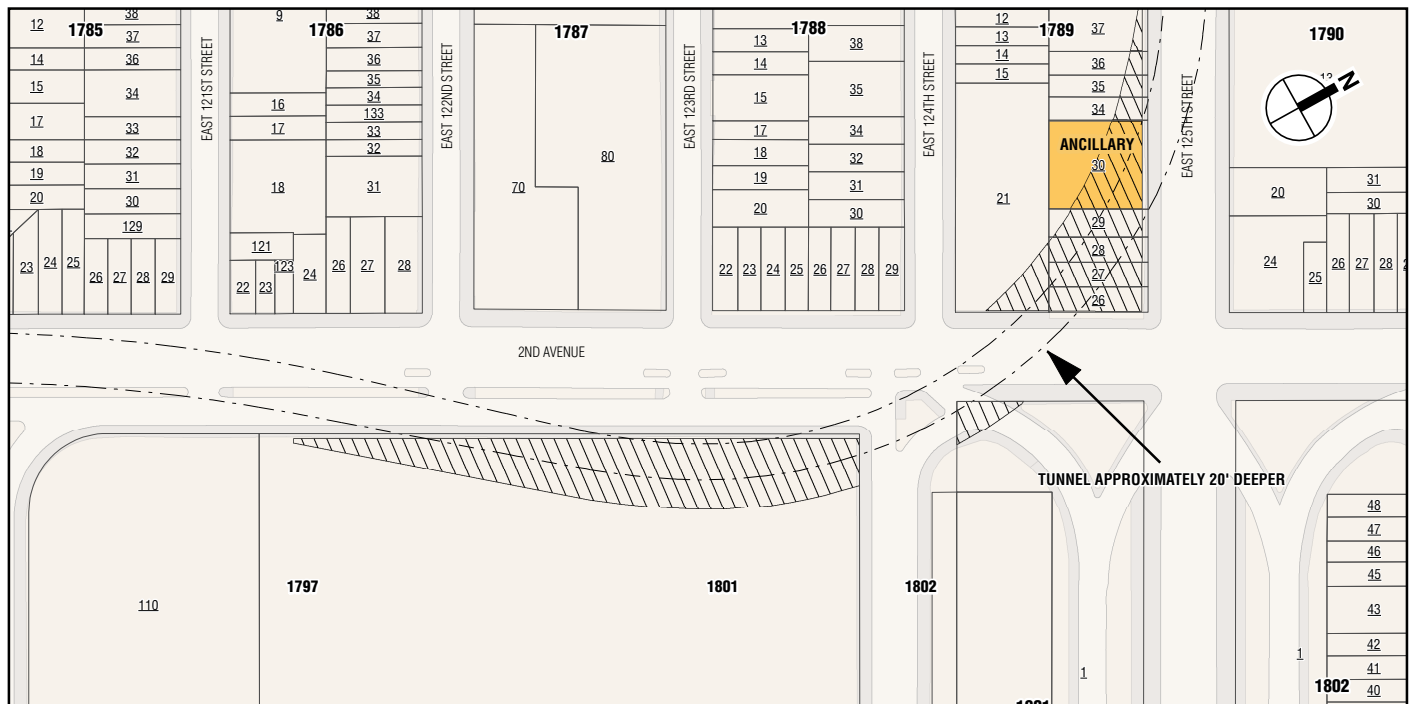
Like the 2004 FEIS Design, the Modified Design would have a curved tunnel alignment from Second Avenue to 125th Street. This 125th Street curve would pass beneath the same properties identified in Section 6.2.1, as well as a small portion of an additional parcel (see **Figure 6-1**). The potential staging area site identified in the 2004 FEIS occupied with auto-related services and residences remains a viable potential staging area, but as shown on **Figure 6-1**, this site would now also be constructed with an ancillary facility and require a permanent acquisition (see Section 6.4.2 below). The vacant lot on Second Avenue that was also identified as a potential staging area in the 2004 FEIS has been merged with adjacent lots and developed as an 11-story mixed residential and commercial building and is no longer under consideration for use during construction.

The changes to the tunnel depth (i.e., vertical alignment) proposed in the Modified Design may reduce, or possibly avoid, the need for temporary displacements on the properties above the curve. With the Modified Design, the tunnel alignment would be about 20 feet deeper at the 125th Street curve than in the 2004 FEIS Design, which would provide greater separation from building foundations. The Modified Design, like the 2004 FEIS Design, would include ground stabilization measures (e.g., grouting) to harden the soil in preparation for tunneling. However, with the Modified Design, this may be conducted primarily from the staging area rather than from within the buildings above the curve, which would reduce disruptions to residents of those buildings.



2004 FEIS Design

- ⋯ Potential Temporary Displacements - 2004 FEIS Design
- ▭ Proposed Construction Staging Site with Building Demolition - 2004 FEIS Design
- ▨ Permanent Subsurface Easement



Modified Design

- ▭ Ancillary
- ▨ Permanent Subsurface Easement

Land Acquisition - Comparison of 2004 FEIS Design and Modified Design
125th Street Curve
Figure 6-1

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Overall, no new temporary property acquisitions or displacements would occur for the Modified Design as compared to the 2004 FEIS Design. Measures are being implemented in the Modified Design to avoid, or reduce, the potential 12-month temporary displacements along the 125th Street tunnel curve identified in the 2004 FEIS, to be determined as design advances. Displacement of the estimated 21 employees and 21 residents at the site of the proposed staging area and new ancillary facility remains consistent with the 2004 FEIS Design.

6.4.2 PERMANENT IMPACTS

As described in Chapter 2, “Description of Phase 2 Modified Design,” the Phase 2 alignment is largely the same as presented in the 2004 FEIS; however, some entrance and ancillary facilities have been relocated due to shifts in platform alignments, constructability considerations, or changes in background conditions that have made sites identified for entrances or ancillary facilities in the 2004 FEIS no longer suitable for that use today. Some entrances and ancillary facilities are also larger than described in the 2004 FEIS due to site-specific conditions, changes in background conditions and engineering standards, and advanced preliminary design (see discussion in Section 2.3.3 of Chapter 2). Additionally, the Modified Design includes a new ancillary facility for the tail tracks and an ancillary facility at the 125th Street tunnel curve. However, as the potential 129th Street storage tracks identified in the 2004 FEIS have been eliminated, an associated ancillary facility identified near 127th Street has also been eliminated. The 2004 FEIS did not identify any potential displacement associated with that ancillary facility. Potential displacement of vault spaces or cellar doors on or beneath the sidewalk near cut-and-cover construction activities would remain the same with the Modified Design.

The 2004 FEIS included a general sizing of ancillary facilities, as design for each Project phase was not yet advanced and site-specific requirements were not yet known. However, based on more advanced design for Phase 2, more space would be required for the ancillary facilities. As described in Chapter 2, Section 2.3.3, the reasons for the increase in size include:

- Construction of Phase 1 of the Second Avenue Subway provided valuable experience for construction of this large and complex capital project. For example, during design of Phase 1, some ancillary facilities needed to be relocated or enlarged from the 2004 FEIS Design to accommodate features such as additional maintenance spaces and meet specific NYCT design requirements. As preliminary engineering has advanced, measures based on this experience have been incorporated into the Modified Design.
- The Modified Design would include a different cooling system for the stations than was envisioned for the 2004 FEIS Design or was constructed in Phase 1, to reduce the operations and maintenance demands of the system, as well as the noise attenuation requirements for the cooling towers. The new cooling system requires more space within the ancillary facility.
- To meet the Project objectives of maintaining neighborhood character and creating transit facilities that are aesthetically pleasing and compatible with neighborhood character, the proposed ancillary facilities in the Modified Design would accommodate ground floor-retail spaces that require additional space not originally contemplated.
- The 106th and 116th Street Station shells would have a relatively shallow alignment in order to align with existing tunnel segments that were constructed in the 1970s for the future subway; therefore, they would have limited space to accommodate operations and maintenance spaces, requiring these spaces to be located in the ancillary facilities.

- Subsequent to the 2004 FEIS, Hurricane Sandy caused widespread flooding and damage in New York City, and modified flood protection design standards have been implemented for NYCT projects throughout the city. With these new design standards, the Modified Design must have more critical elements located above ground at higher design elevations, which requires larger above-ground structures for the ancillary facilities.
- The 125th Street Station would require additional ancillary space to support the functions of a terminal station.
- During construction of Phase 1, MTA experienced substantial constructability risks and challenges related to underpinning, stabilizing, and strengthening adjacent buildings from working within smaller staging site footprints. As a result, larger work sites have been identified in the Modified Design to avoid these risks and associated costs.

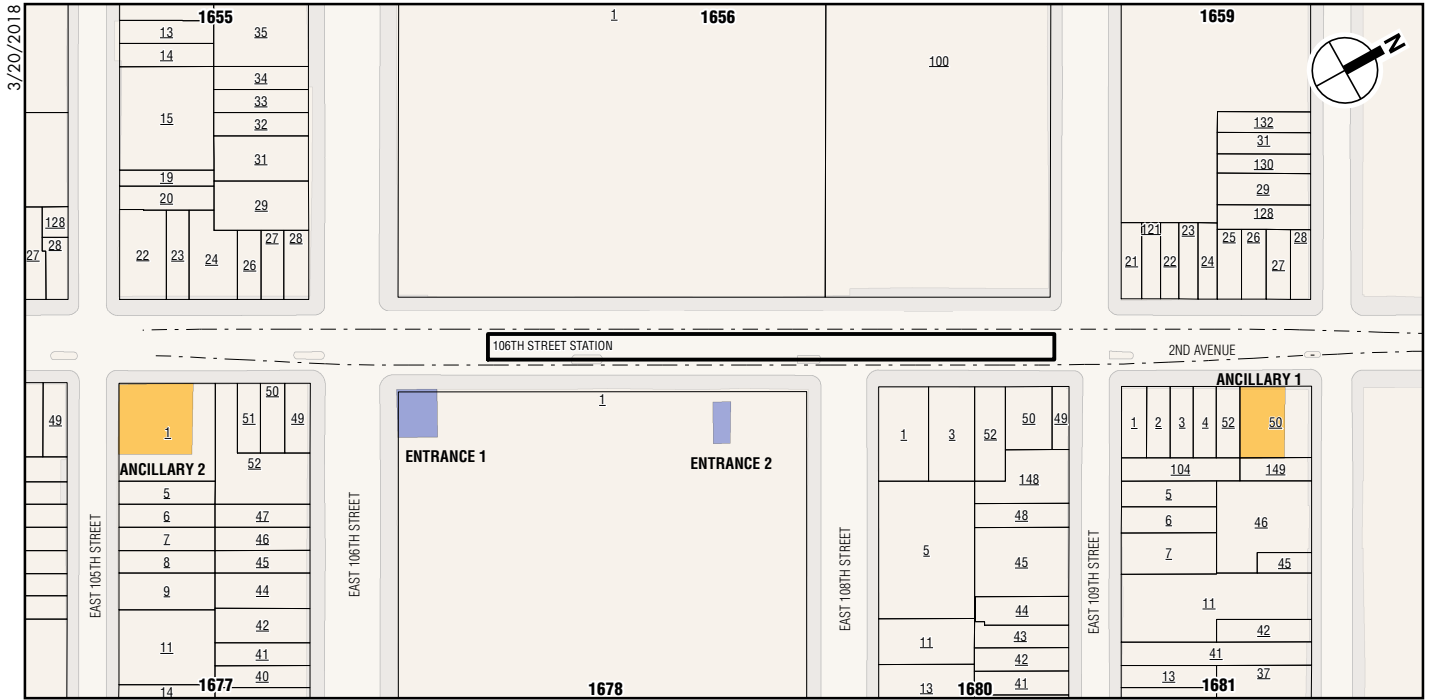
As also discussed in Section 2.3.3 of Chapter 2, the Modified Design would also require more area for station entrances, to allow for more full-service entrances (with escalators and elevators to meet the requirements of the Americans with Disabilities Act) as passenger loading demand has been refined, and to minimize constructability impacts to adjacent buildings.

MTA is using the site selection criteria outlined in the 2004 FEIS for identifying new sites, when ancillary facilities and station entrances must be relocated. Those criteria are described in Section 2.2.2 of Chapter 2, ‘Description of Phase 2 Modified Design.’ As noted there, sites for station entrances and ancillary facilities are selected to limit the need for displacement of residents or businesses where possible, by choosing potential easements in existing or planned buildings, vacant lots and buildings, plazas and arcades, and open areas before occupied buildings. The entrance and ancillary facility locations must provide functionality to the subway system, but sites have been selected with the intention of avoiding occupied residences, historic sites, active commercial uses, and parks and recreational spaces, where possible. Priority is given to acquisition of vacant or underutilized sites and structures, to the extent practicable. **Table 6-2** provides an overview of each potential property acquisition. Modifications to planned property acquisitions specific to each section of the Phase 2 alignment are summarized below:

- **106th Street Station:** As shown in **Figure 6-2**, Entrance 1 and Entrance 2 would remain in the same general location as provided in the 2004 FEIS, but would be expanded for the reasons discussed above. Entrances 1 and 2 would continue to require partial acquisitions on Block 1678, Lot 1, part of the New York City Housing Authority’s (NYCHA) Franklin Plaza Apartments. Entrance 2 would be shifted to the corner and would require displacement of approximately 14 spaces in a Franklin Plaza Apartments parking lot. Ancillary 1 and Ancillary 2 would both be shifted within the same original blocks to avoid newly constructed mid-rise buildings on the previous locations—thereby reducing displacements and costlier demolition—and to better align with the shifted station shell. The ancillary facilities would also be larger, as discussed above.

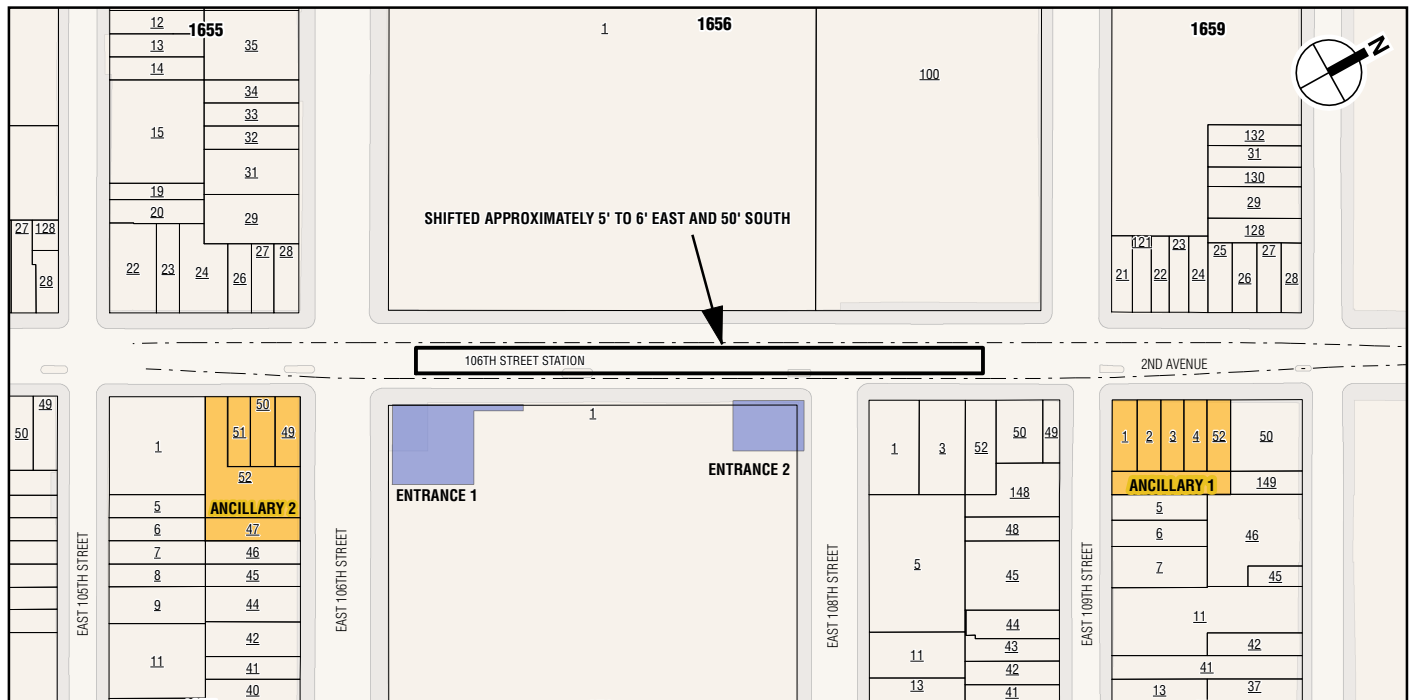
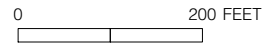
Overall, the Modified Design for the 106th Street Station would require the same two partial acquisitions (though slightly larger) as identified in the 2004 FEIS and requires 11 full property acquisitions as compared to 4 in the 2004 FEIS.

- **116th Street Station:** As shown in **Figure 6-3**, Entrance 1 would remain in a similar location as in the 2004 FEIS Design, but would be larger for the reasons discussed above. This expansion incorporates a portion of a community center, the Corsi Senior Center operated by Union Settlement (Block 1688, part of Lot 45) at the NYCHA Corsi Houses. MTA will coordinate with NYCHA and the Union Settlement to address this displacement and



2004 FEIS Design

- Entrance
- Ancillary
- Station Platform



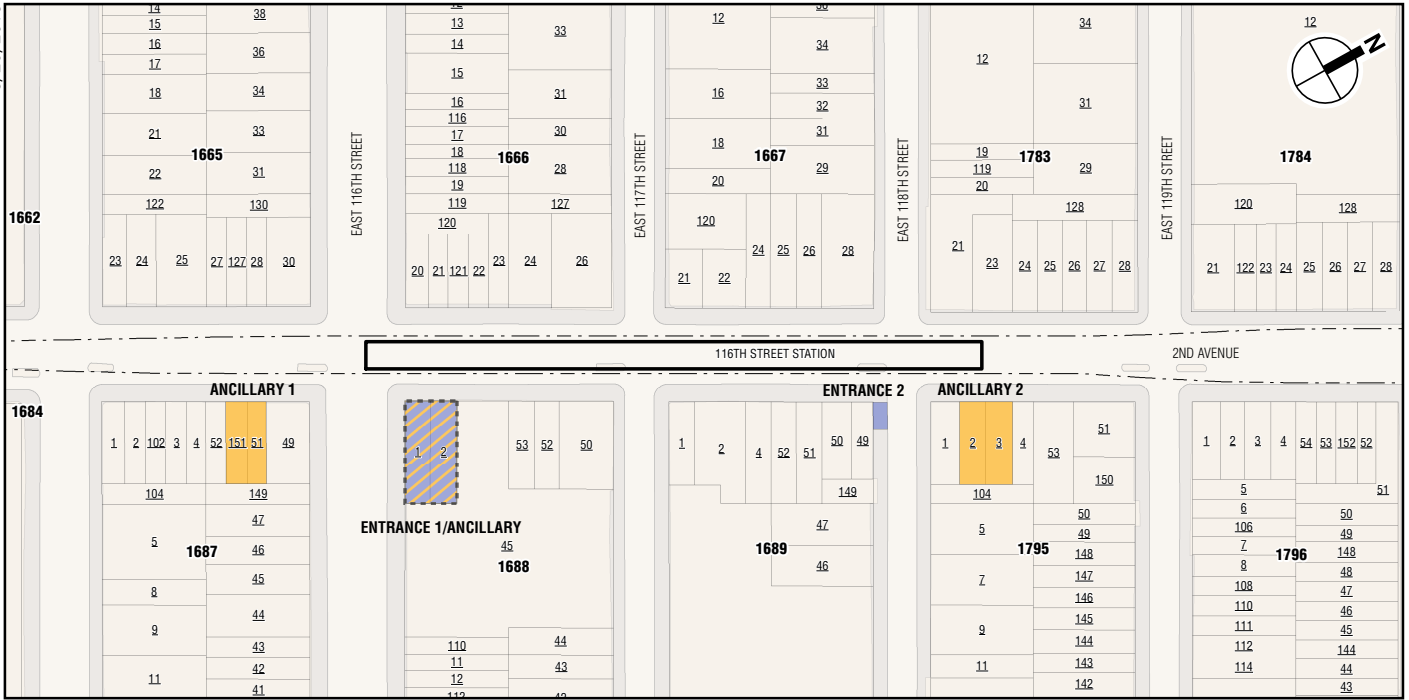
Modified Design

- Entrance
- Ancillary
- Station Platform



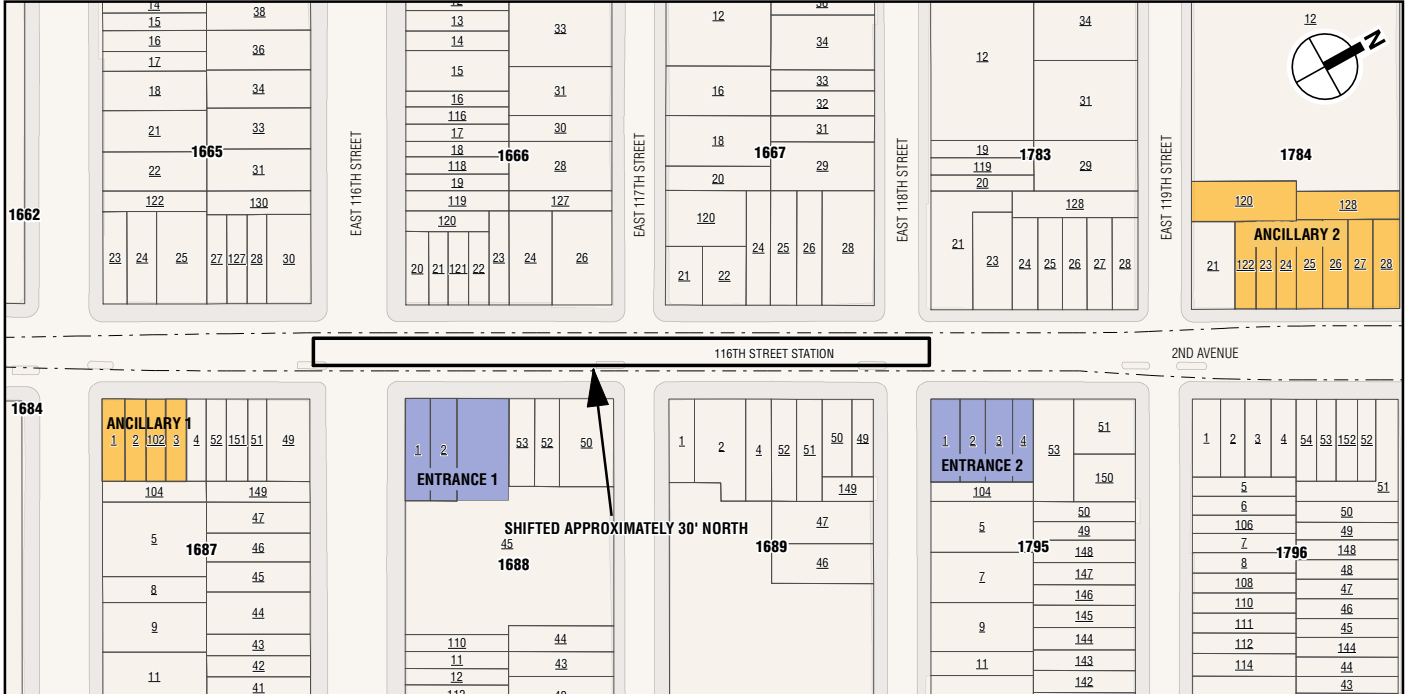
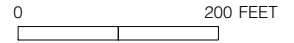
Land Acquisition - Comparison of 2004 FEIS Design and Modified Design
106th Street Station
Figure 6-2

3/20/2018



2004 FEIS Design

- Ancillary
- Entrance/Ancillary
- Station Platform



Modified Design

- Entrance
- Ancillary
- Station Platform



Land Acquisitions - Comparison of 2004 FEIS Design and Modified Design
116th Street Station
Figure 6-3

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appropriately restore uses of the facility. Entrance 2 would be in a new location across 118th Street from its location in the 2004 FEIS Design and would be a full-service (with escalators and an elevator) entrance to accommodate the anticipated passenger load, rather than a small sidewalk stairway entrance as it was in the 2004 FEIS Design.

Ancillary 1 would be in a location farther south on the same block to avoid impacts to the Banca Commerciale Italiana building, a newly designated historic structure (see Chapter 8, “Historic and Archaeological Resources”), and to provide a better ventilation connection to the subway structure. Ancillary 2 would be relocated about one block farther north, which would provide a better ventilation connection to the station box and tunnel section, and would provide a staging area for the TBM launch operations.

The area shown on **Figure 6-3** for Ancillary 2 would not only accommodate the new ancillary facility, but would provide a staging area for construction of the station and TBM operations for the tunnel curve and along 125th Street. Not all properties identified for Ancillary 2 may be needed and as design advances, opportunities will be investigated to reduce property acquisitions, if practicable. However, a number of the structures on the site are vacant; they have been included to allow design flexibility and to avoid constructability issues associated with reinforcing these structures during construction.

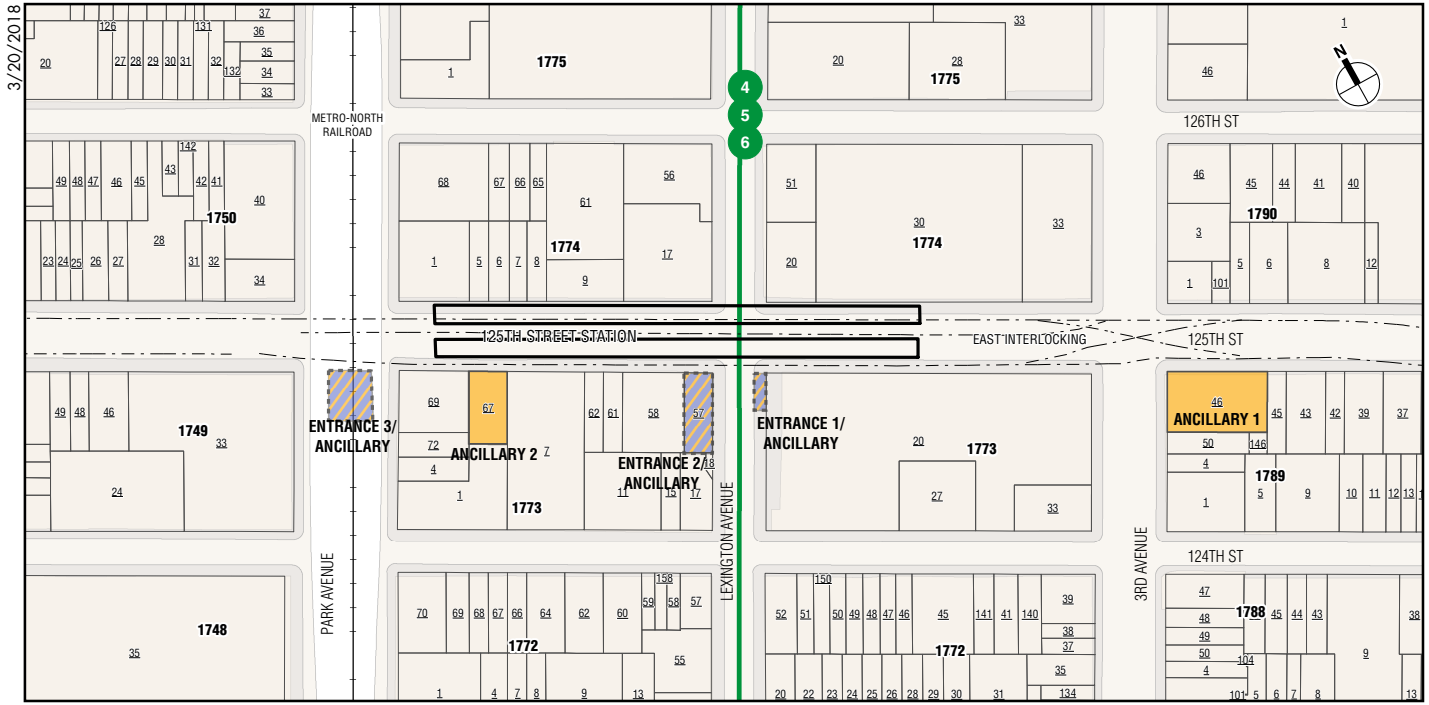
In summary, the Modified Design for the 116th Street Station would require 19 full property acquisitions and one partial property acquisition, as compared to seven full acquisitions and no partial acquisitions in the 2004 FEIS.

- **125th Street Curve:** As shown in **Figure 6-1**, the Modified Design would include an ancillary facility on 125th Street near Third Avenue to provide intermediate tunnel ventilation and emergency egress between stations. This site (Block 1789, Lot 30) was previously identified as a temporary acquisition for a construction staging site in the 2004 FEIS Design and required demolition of the existing building, but no permanent acquisition or ancillary facility was proposed here. While the ancillary facility now requires a permanent acquisition, it does not alter displacements that were previously identified for this site.

Lot 25 (now merged with Lot 21) on this block was previously identified as a temporary acquisition for construction staging, but has been developed with a large residential development and is no longer under consideration. Permanent subsurface easements where the tunnel travels below private property would remain largely consistent with the 2004 FEIS.

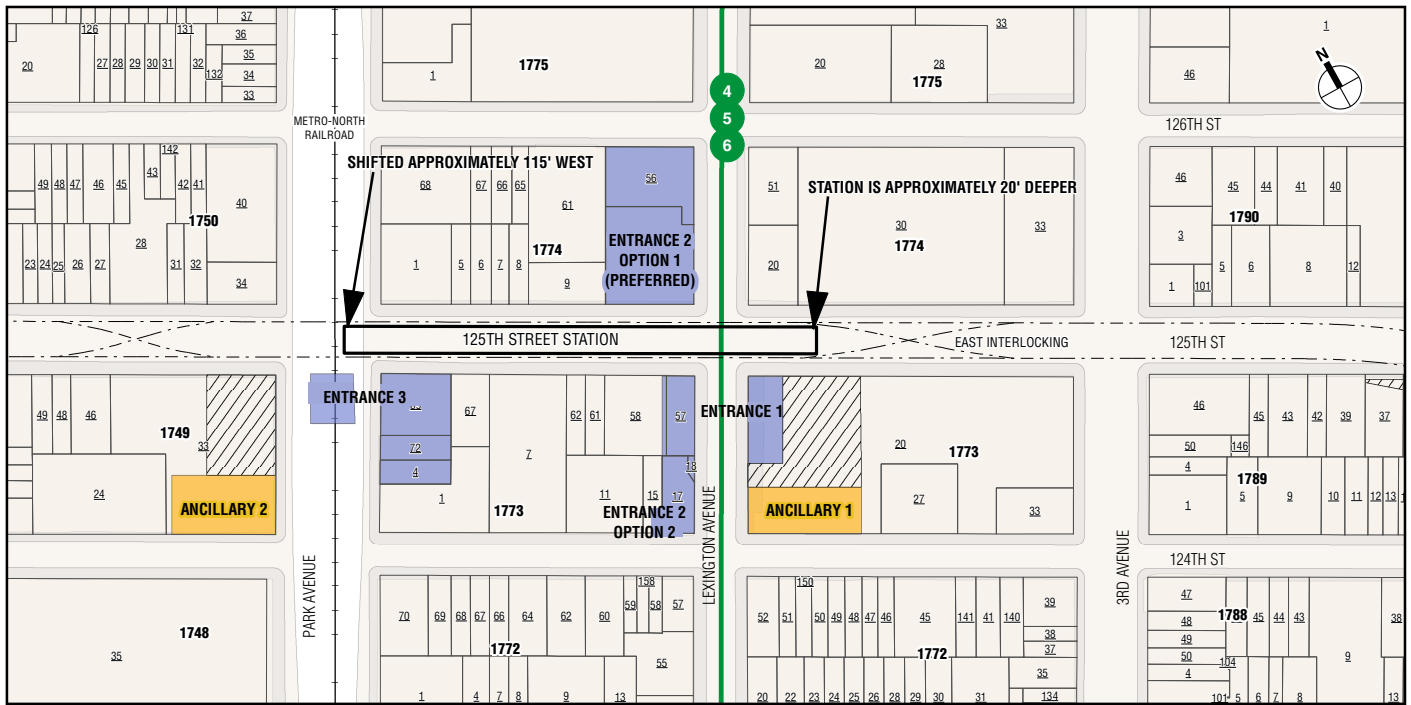
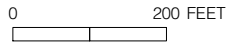
- **125th Street Station:** As shown in **Figure 6-4**, Entrance 1 and an option for Entrance 2 (Option 2) would remain in similar locations with the Modified Design as presented in the 2004 FEIS Design, but would be larger for the reasons discussed above. In the 2004 FEIS Design, Entrance 1 was envisioned as a small sidewalk entrance in the public right-of-way, but the expanded footprint with the Modified Design now requires partial acquisition of an adjacent lot (Block 1773, Lot 20).

With the Modified Design, an additional (preferred) option for Entrance 2 (Option 1) is being investigated at the northwest corner of 125th Street and Lexington Avenue that could enhance transfers between the Second Avenue Subway and the existing Lexington Avenue (4/5/6) subway line. To accommodate anticipated passenger demand, MTA anticipates a need for at least three escalators at Entrance 2; two for the peak direction and one for the opposing direction. The property at the southwest corner (Option 2) is not large enough to accommodate the escalator core for three escalators for this deep station, and expanding into the adjacent property to the west could result in impacts to a historic bank on that site that is listed on the



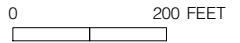
2004 FEIS Design

- Ancillary
- Entrance/Ancillary
- Station Platform



Modified Design

- Entrance
- Permanent Subsurface Easement
- Ancillary
- Station Platform



Land Acquisition - Comparison of 2004 FEIS Design and Modified Design
125th Street Station
Figure 6-4

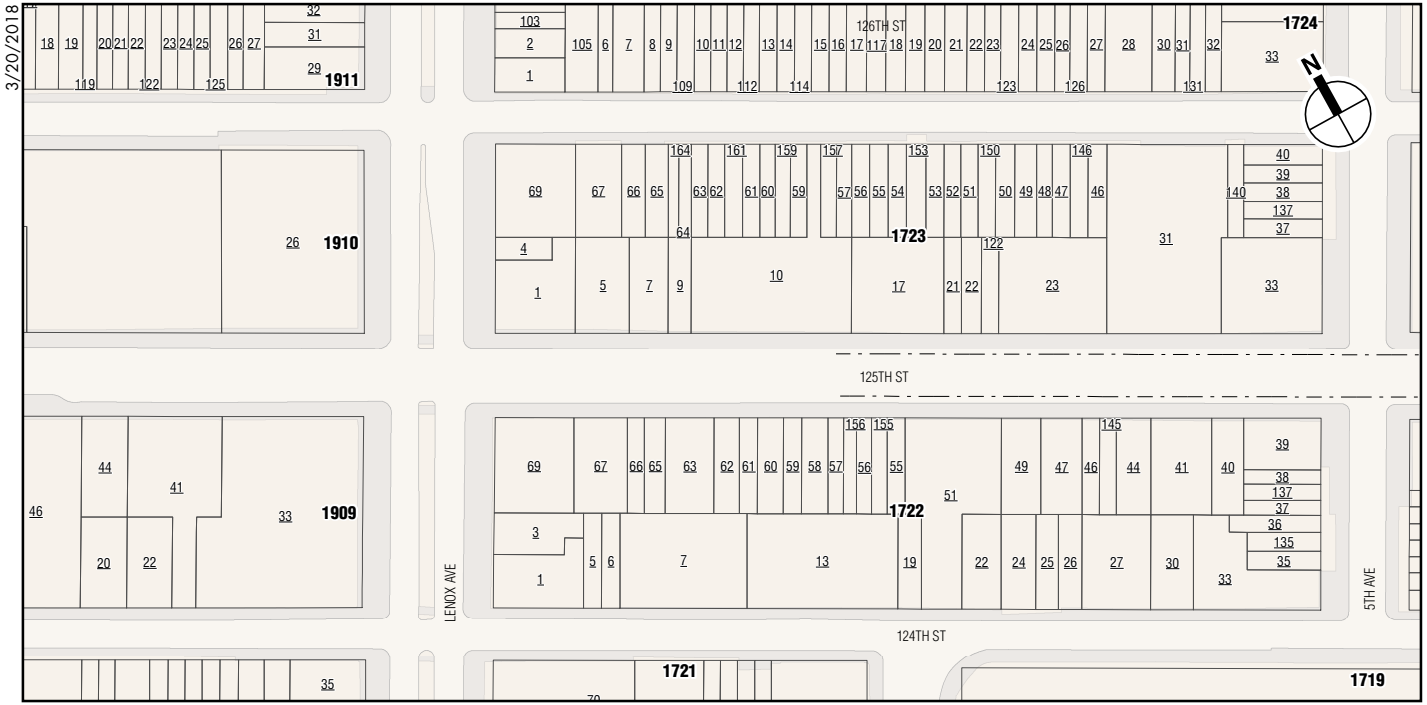
State and National Register of Historic Places. Therefore, an entrance at the southwest corner (Option 2) could accommodate only two escalators. The property at the northwest corner (Entrance 2, Option 1) would adequately accommodate three escalators. In addition, the location of Entrance 2 with Option 1 could potentially provide a higher capacity transfer connection between the Second Avenue Subway and Lexington Avenue (4/5/6) subway line by providing a transfer point at the northern end of the Lexington Avenue (4/5/6) subway platform in addition to the transfer point at the southern end of the platform provided by Entrance 1. This would allow a greater distribution of passengers for the expected heavy use of this station. Conversely, Entrance 2 with Option 2 would remain at the southern end of the platform, thereby concentrating passenger movements in a smaller area. These two options are being evaluated to determine optimal connectivity and distribution of transfer passengers, and the final option will be selected as design advances.

Entrance 3 would continue to be a shallow entrance within the Park Avenue median under the Metro-North Railroad viaduct, but with the Modified Design this entrance would be larger than in the 2004 FEIS Design and would incorporate property at the southeast corner of 125th Street and Park Avenue. This additional site is needed to provide more space to accommodate passenger demand and vertical circulation elements. It is also needed to address constructability constraints associated with working near the foundations and superstructure of the railroad viaduct and Entrance 3's proximity to a historic Comfort Station building. Depending on the results of ongoing investigations related to the viaduct, this entrance may shift entirely to the corner property.

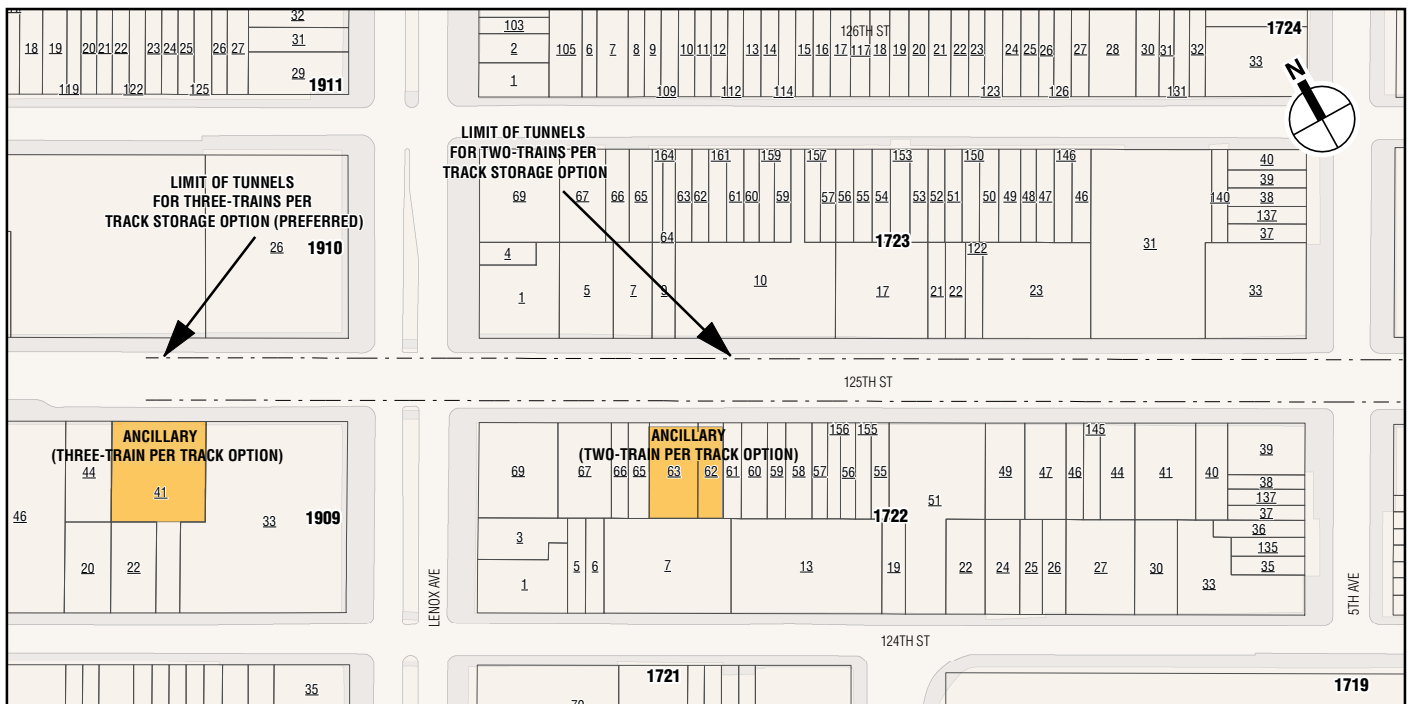
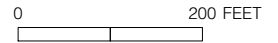
With the Modified Design, Ancillary 1 and Ancillary 2 would be relocated to better align with the 125th Street Station, which would be shifted westward to allow a revised construction technique. In addition, these ancillary facilities would be sited on 124th Street rather than 125th Street, to reduce construction impacts along the heavily traveled 125th Street. As discussed in Chapter 2, the sites of Entrance 1/Ancillary 1 and Ancillary 2 are the subject of private development interests, and MTA will coordinate with the developers, as needed.

In summary, the Modified Design for the 125th Street Station would require six full property acquisitions with the preferred Option 1 for Entrance 2 and five full property acquisitions with Option 2 of Entrance 2, as compared to one full acquisition in the 2004 FEIS Design. Two partial property acquisitions would be required, which is consistent with the 2004 FEIS Design. Two permanent subsurface easements would be required to connect Ancillary 1 and Ancillary 2 to the subway station structure (see **Figure 6-4**).

- **125th Street Tail Tracks:** The Modified Design would include an ancillary facility for the 125th Street tail tracks, which was not included in the 2004 FEIS Design, since the storage tracks were shorter in length and essentially part of the 125th Street Station. As shown in **Figure 6-5**, two options for the tail tracks are now being considered, which would locate an ancillary facility either just east or just west of Lenox Avenue. The two-train per storage track option would require two full property acquisitions, and the three-train per storage track would require one partial property acquisition. At this time, the three-train per track storage option is preferred, as it provides greater capacity to support future phases (i.e., Phases 3 and 4) of the Second Avenue Subway Project, but the final selection will be determined as financial considerations and further operations planning is conducted. The temporary acquisition of Block 1789, Lot 30 identified in the 2004 FEIS Design would be a permanent acquisition with the Modified Design, for a new ancillary facility that was not included in the 2004 FEIS Design, but the number of estimated displacements remains the same.



2004 FEIS Design



Modified Design

- Entrance
- Ancillary



Land Acquisition - Comparison of 2004 FEIS Design and Modified Design
125th Street Tail Tracks
Figure 6-5

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Table 6-2 provides a summary of potential property acquisitions for the Modified Design. It identifies full and partial acquisitions, as well as permanent subsurface easements where subway facilities would be located beneath private property but would not affect the use of that property. Potential residential and commercial (employee) displacements are also provided in **Table 6-2**. It is assumed that displacements would only result from full acquisitions, but partial acquisitions and permanent subsurface easements would not affect property use or result in displacements. Potential residential displacements are calculated based on average household size in the area as reported by the 2011-2015 American Community Survey (ACS) and employee displacements are based on rates established for each type of business sector (e.g., retail, industrial, etc.). These rates are provided in footnotes at the end of the table.

In total, with the Modified Design an estimated 36 (for the preferred design option) to 39 potential full property acquisitions would be required and 4 to 5 (for the preferred design option) potential partial property acquisitions would be required. As shown in **Table 6-2**, the potential property acquisitions would range from an estimated displacement of 76,171 to 180,981 square feet (for the preferred design option) of commercial space and 157 to 505 employees (for the preferred design option). The number of residential displacements would be the same under either design option, at an estimated 65 occupied residential units and 170 residents.

As design proceeds from preliminary engineering to final design, opportunities to reduce property acquisitions will be identified, if practicable. In the event that property required for construction staging is no longer needed for permanent project operation, excess property would be used or disposed of in accordance with MTA real estate procedures and will adhere to all pertinent federal regulations. Property that is sold would be subject to underlying zoning regulations. In addition, the Modified Design incorporates retail spaces within the ancillary facilities and entrances, which would allow for reinstating some of the displaced commercial uses.

In addition, there may be an opportunity to include other development in combination with some ancillaries and/or entrances, within the building envelope permitted by the zoning recently enacted through the East Harlem Rezoning adopted by New York City. No such overbuild or other development projects are being proposed at this time. At the 125th Street Station, entrances and ancillaries planned for sites that are currently vacant and the subject of private development interests will be coordinated with the developers for those sites as design advances. If MTA pursues an opportunity for joint development in accordance with FTA joint development guidelines, such proposal(s) would be subject to additional NEPA re-evaluation(s).

The Modified Design, like the 2004 FEIS Design, would require permanent subsurface easements at the 125th Street curve under the 11 properties identified in the 2004 FEIS Design (although three of the original lots have now been merged with Lot 21) and includes one additional permanent subsurface easement beneath a small section of Block 1789, Lot 37. Consistent with the 2004 FEIS, no permanent displacements would result from these easements.

**Table 6-2
Potential Property Acquisitions Required for the Modified Design**

Proposed Use	Block	Lot	Land Use	Occupied Commercial Displacement (Square Feet)	Commercial Displacement (Employees)	Occupied Residential Displacement (Units)	Residential Displacement (Residents)	Acquisition Type		
								Full	Partial	Perm't Easement
106th Street Station (see Figure 6-2)										
Ancillary 1	1677	47	1-story commercial	2,500 (retail)	6	0	0	✓		
	1677	49	2-story mixed residential (vacant) and commercial	1,725 (retail)	4	0	0	✓		
	1677	50	4-story mixed residential and commercial	1,362 (retail)	3	6	14	✓		
	1677	51	4-story mixed residential and place of worship	1,458 (institutional)	1	5	12	✓		
	1677	52	4-story mixed residential (vacant), commercial, and lumber yard	1,725 (retail) 5,669 (industrial)	15	0	0	✓		
Entrance 1 and Entrance 2	1678	01	Portion of plaza and parking lot at residential building	0	0	0	0		✓	
Ancillary 2	1681	01	4-story mixed residential and commercial	1,296 (retail)	3	2	6	✓		
	1681	02	4 story mixed residential and commercial	1,250 (retail)	3	6	17	✓		
	1681	03	4 story mixed residential and commercial	1,250 (retail)	3	6	17	✓		
	1681	04	4-story mixed residential and commercial	1,263 (retail)	3	6	17	✓		
	1681	52	4-story mixed residential and commercial	1,250 (retail)	3	6	17	✓		
	1681	104	3-story residential	0	0	4	11	✓		
<i>Subtotal</i>				20,748	44	41	111	Full: 11 Partial: 1 Perm't Easements: 0		
116th Street Station (see Figure 6-3)										
Ancillary 1	1687	01	4-story mixed residential and commercial	1,673 (retail)	4	6	14	✓		
	1687	02	4-story mixed residential and commercial	2,100 (retail)	5	1	2	✓		
	1687	03	4-story mixed residential (vacant) and commercial	1,020 (retail)	3	0	0	✓		
	1687	102	Industrial	1,600 (industrial)	3	0	0	✓		

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Supplemental Environmental Assessment**

**Table 6-2 (Cont'd)
Potential Property Acquisitions Required for the Modified Design**

Proposed Use	Block	Lot	Land Use	Occupied Commercial Displacement (Square Feet)	Commercial Displacement (Employees)	Occupied Residential Displacement (Units)	Residential Displacement (Residents)	Acquisition Type		
								Full	Partial	Perm't Easement
116th Street Station (Cont'd)										
Entrance 1	1688	01	1-story commercial	2,300 (retail)	6	0	0	✓		
	1688	02	2-story commercial	2,500 (retail)	6	0	0	✓		
	1688	45	1-story community center at residential building	5,000 (institutional)	5	0	0		✓	
Entrance 2	1795	01	2-story place of worship	4,023 (institutional)	8	3	7	✓		
	1795	02	Parking Lot	0	0	0	0	✓		
	1795	03	Parking Lot	0	0	0	0	✓		
	1795	04	3-story mixed residential and commercial	982 (retail)	2	2	5	✓		
Ancillary 2	1784	23	3-story mixed residential and commercial (vacant)	0	0	0	0	✓		
	1784	24	3-story mixed residential and place of worship	900 (institutional)	1	2	5	✓		
	1784	25	4-story mixed residential and commercial (vacant)	0	0	0	0	✓		
	1784	26	4-story mixed residential and commercial (vacant)	0	0	0	0	✓		
	1784	27	4-story mixed residential and commercial (vacant)	0	0	0	0	✓		
	1784	28	4-story mixed residential and commercial (vacant)	0	0	0	0	✓		
	1784	120	Parking Lot	0	0	0	0	✓		
	1784	122	3-story mixed residential and commercial	1,952 (retail)	5	2	5	✓		
1784	128	5-story residential (vacant)	0	0	0	0	✓			
<i>Subtotal</i>				<i>24,050</i>	<i>48</i>	<i>16</i>	<i>38</i>	<i>Full: 19 Partial: 1 Perm't Easements: 0</i>		

Table 6-2 (Cont'd)
Potential Property Acquisitions Required for the Modified Design

Proposed Use	Block	Lot	Land Use	Occupied Commercial Displacement (Square Feet)	Commercial Displacement (Employees)	Occupied Residential Displacement (Units)	Residential Displacement (Residents)	Acquisition Type		
								Full	Partial	Perm't Easement
125th Street Curve (see Figure 6-1)										
Tunnel below private property	1797	01	Greenspace areas at residential complex	0	0	0	0			✓
	1081	01	RFK Bridge ramps and roadway median	0	0	0	0			✓
	1789	21	12-story mixed residential and commercial	0	0	0	0			✓
	1789	26	5-story mixed residential and commercial	0	0	0	0			✓
	1789	27	5-story mixed residential and commercial	0	0	0	0			✓
	1789	28	5-story mixed residential and commercial	0	0	0	0			✓
	1789	29	5-story mixed residential and commercial	0	0	0	0			✓
	1789	30	2-story mixed residential and commercial	8,550 (retail)	21	8	21		✓	
	1789	34	4-story religious institution	0	0	0	0			✓
	1789	35	4-story religious institution	0	0	0	0			✓
	1789	36	4-story religious institution	0	0	0	0			✓
1789	37	3-story public library	0	0	0	0			✓	
<i>Subtotal</i>				8,550	21	8	21	Full: 1 Partial: 0 Perm't Easements: 11		
125th Street Station (see Figure 6-4)										
Entrance 1 and Ancillary 1	1773	20	1-story commercial (vacant)	0	0	0	0		✓	✓
Entrance 2 (Option 1) [preferred]	1774	17	3-story office and commercial	24,930 (retail) 12,465 (office)	112	0	0	✓		
	1774	56	6-story office and commercial	47,458 (office) 11,490 (retail)	219	0	0	✓		
Entrance 2 (Option 2)	1773	17	1-story commercial	4,037 (retail)	10	0	0	✓		
	1773	18	2-story commercial (vacant)	0	0	0	0	✓		
	1773	57	2-story commercial (partially vacant)	3,297 (office) 2,100 (retail)	18	0	0	✓		

**Second Avenue Subway Phase 2
Supplemental Environmental Assessment**

**Table 6-2 (Cont'd)
Potential Property Acquisitions Required for the Modified Design**

Proposed Use	Block	Lot	Land Use	Occupied Commercial Displacement (Square Feet)	Commercial Displacement (Employees)	Occupied Residential Displacement (Units)	Residential Displacement (Residents)	Acquisition Type		
								Full	Partial	Perm't Easement
125th Street Station (Cont'd)										
Entrance 3	1773	4	Vacant land	0	0	0	0	✓		
	1773	69	4-story hotel and ground floor commercial (vacant)	8,512 (hotel)	3	0	0	✓		
	1773	72	Vacant lot	0	0	0	0	✓		
Ancillary 2	1749	33	Vacant	0	0	0	0		✓	✓
<i>Subtotal (with Entrance 2, Option 1) [preferred option]</i>				104,855	334	0	0	Full: 5 Partial: 2 Perm't Easements: 2		
<i>Subtotal (with Entrance 2, Option 2)</i>				17,946	31	0	0	Full: 6 Partial: 2 Perm't Easements: 2		
125th Street Tail Tracks (see Figure 6-5)										
Ancillary (Two-Train per Track Option)	1722	62	4-story mixed residential and commercial (vacant)	0	0	0	0	✓		
	1722	63	1-story commercial	5,147 (retail)	13	0	0	✓		
Ancillary (Three-Train per Track Option) [preferred]	1909	41	2-story commercial (under construction)	23,018 (retail)	58	0	0		✓	
<i>Subtotal (Two-Train Option)</i>				5,147	13	0	0	Full: 2 Partial: 0 Perm't Easements: 0		
<i>Subtotal (Three-Train Option) [preferred]</i>				23,018	58	0	0	Full: 0 Partial: 1 Perm't Easements: 0		

Table 6-2 (Cont'd)
Potential Property Acquisitions Required for the Modified Design

Proposed Use	Block	Lot	Land Use	Occupied Commercial Displacement (Square Feet)	Commercial Displacement (Employees)	Occupied Residential Displacement (Units)	Residential Displacement (Residents)	Acquisition Type		
								Full	Partial	Perm't Easement
<i>Total (with preferred design options)*</i>				180,981	505	65	170	Full: 36 Partial: 5 Perm't Easements: 13		
<i>Total (with alternate design options)*</i>				76,171	157	65	170	Full: 39 Partial: 4 Perm. Easements: 13		
Notes:										
<p>1. Employee numbers are for full-time equivalent (FTE) employees. Commercial displacement was estimated using the following rates: Retail: 1 full-time equivalent (FTE) employee per 400 square feet (sf), Office: 1 FTE employee per 250 sf, Manufacturing/Industrial: 1 FTE employee per 500 sf, Institutional: 1 FTE per 1,000 sf, Hotel: 1 FTE per 3 hotel rooms, Vacant space was assumed to be unoccupied.</p> <p>2. Residential units represent all occupied units in the building (not including vacant units), based on New York City Department of City Planning, Bytes of the Big Apple, MapPLUTO, 16v2 data. Number of residents is based on the average household size for the census tract.</p> <p>3. Building occupancy was assessed during field visits conducted in October 2017. For buildings that appeared vacant, 0 displacements are assumed, which will be confirmed during final design.</p> <p>4. For partial acquisitions and permanent easements, it is anticipated that there will not be any displacements from these properties.</p> <p>* Depending on the design options that are advanced (e.g., Entrance 2, Option 1 or 2 at 125th Street and the two-train or three-train storage option), displacements would vary.</p> <p>Sources: NYC Dept. of City Planning, Bytes of the Big Apple, MapPLUTO, 16v2; New York City Digital Tax Map, http://gis.nyc.gov/taxmap/map.htm, last accessed on October 24, 2017; LavaMap, https://lavamap.com/, last accessed on October 24, 2017; U.S. Census Bureau 2011-2015 American Community Survey 5-year estimates.</p>										

6.5 CONCLUSIONS

Like the 2004 FEIS Design, the Modified Design would require acquisition of residential and commercial buildings on sites proposed for new station entrances and ancillary facilities. The 2004 FEIS identified preliminary locations for property acquisitions based on conceptual design, but noted that the required properties may change as design advances but the types of acquisition and the nature and extent of impacts would be similar. With the Modified Design, more properties would be acquired and the amount of displacement would be greater than for the 2004 FEIS Design. **Table 6-3** provides a comparison of property acquisitions with the 2004 FEIS Design and the Modified Design. While the number of property acquisitions and displacements would be greater for the Modified Design than identified in the 2004 FEIS, the nature and extent of impacts would be similar to those identified in the 2004 FEIS. Compensation and displacements would continue to be conducted in accordance with the EDPL and Uniform Act. Therefore, as a result of the Phase 2 Modified Design, there will not be any new or different significant adverse impacts related to acquisitions, displacements, and relocations not previously identified in the 2004 FEIS and ROD.

Table 6-3
Comparison of Property Acquisitions, FEIS Design versus Modified Design

Segment	2004 FEIS Design (2004) and Modified Design (2018)	Occupied Commercial Displacement (Square Feet)	Commercial Displacement (Estimated Employees)	Occupied Residential Displacement (Estimated Units)	Residential Displacement (Estimated Residents)	Full / Partial Acquisitions
106th Street Station	2004	3,600	9	0	0	4 full / 2 partial
	2018	20,748	44	41	111	11 full / 1 partial
116th Street Station	2004	4,432	12	12	36	7 full / 0 partial
	2018	24,050	48	16	38	19 full / 1 partial
125th Street Curve	2004	8,550 (retail)	21	8	21	0 full / 0 partial
	2018	8,550	21	8	21	1 full / 0 partial
125th Street Station	2004	6,594	21	0	0	1 full / 2 partial
	2018 (preferred)	104,855	334	0	0	5 full / 2 partial
	2018 (alternate)	17,946	31	0	0	6 full / 2 partial
125th Street Tail Tracks	2004	N/A	N/A	N/A	N/A	N/A
	2018 (pref.)	23,018	58	0	0	0 full / 1 partial
	2018 (alt.)	5,147	13	0	0	2 full / 0 partial
TOTAL	2004	23,176	63	20	57	12 full / 4 partial
	2018 (preferred)	180,981	505	65	170	36 full / 5 partial
	2018 (alternate)	76,171	157	65	170	39 full / 4 partial

*