4.1 INTRODUCTION

Consistent with the 2004 FEIS, social and economic conditions for purposes of this Supplemental EA are defined as those components of a community that influence its character. These conditions include its population, economic base, land uses and the zoning and public policies that support those land uses, important community and municipal facilities and parks, urban design, street grid and other structural features, and those elements, examined in other chapters in this Supplemental EA, such as traffic, pedestrian conditions, and noise, which also contribute to neighborhood conditions.

The introduction of a major new transit line (i.e., the Second Avenue Subway) will affect many of these components of neighborhood character, either temporarily (during construction) or permanently (during operation). This chapter describes the conclusions of the 2004 FEIS with respect to social and economic conditions (see Section 4.2), discusses the changes that have occurred to background conditions (Section 4.3), and describes any changes in conclusions that would result from the Modified Design (Section 4.4). The potential impacts related to residential and business displacement are described in Chapter 6 of this Supplemental EA, "Displacement and Relocation."

The 2004 FEIS concluded that construction of the Project would result in significant adverse impacts on social and economic conditions, and that once the Project is completed, it would result in beneficial impacts on social and economic conditions. The Modified Design of Phase 2 would not change the overall conclusions of the 2004 FEIS. However, with the Modified Design, the construction of the new subway tunnel using a Tunnel Boring Machine (TBM) rather than the previously planned cut-and-cover construction activities would substantially reduce surface level impacts in this area.

4.2 FEIS FINDINGS

The 2004 FEIS examined social and economic conditions for the full-length of the Second Avenue Subway, with the discussion divided into seven study areas based on overall neighborhoods. As described in the 2004 FEIS, East Harlem is a moderate-density, largely residential area with some industrial uses concentrated at its northern end and a growing commercial area concentrated on 125th Street. The housing structures vary from four- to six-story tenements and rowhouses built on narrow lots to high-rise public housing developments built on superblocks surrounded by open areas. The spaces throughout the superblocks and the predominance of lower-height buildings elsewhere give a general feeling of openness with substantial views of the sky and promote a high level of activity. Neighborhood commercial uses and ground-floor retail space line the north-south avenues and the major crosstown (east-west) streets at 96th, 106th, 116th, and 125th Streets.

The 2004 FEIS stated that the southern portion of East Harlem, focused on 106th Street, is considered Spanish Harlem and many retail stores in the area cater to this ethnic community. In contrast, the northeastern corner of East Harlem contains mostly transportation and industrial uses,

including bus facilities and surface parking lots, with little pedestrian traffic. The 2004 FEIS also described that this corner of East Harlem has several transportation arterials, including approaches to the Willis and Third Avenue Bridges, numerous approaches to the Triborough Bridge (now the Robert F. Kennedy Bridge), the Harlem River Drive, and the FDR Drive along the riverfront.

The 2004 FEIS noted signs of new residential development and commercial investment that were occurring in 2004, with some derelict buildings, vacant ground-floor retail spaces, and empty lots being replaced by, or proposed for, new development. Through 2025, the 2004 FEIS projected over one million square feet of new development, primarily retail and residential uses, including up to 4,000 new residential units. It also noted that East 125th Street had seen a major retail revitalization in recent years, with the addition of several large retail stores including national chains.

The 2004 FEIS described the zoning in place in the East Harlem study area, including a Special Transit Land Use District (STLUD) that was established in 1974 along the length of Second Avenue to support construction of the Second Avenue Subway. The district was mapped on Second Avenue where the future Second Avenue Subway stations were to be located in the 1970s design. By encouraging transit entrances off of the sidewalk, it was intended to ease pedestrian flows, provide light and air to underground transit facilities, encourage development that promotes needed pedestrian amenities, coordinate present and future relationship of land uses within the district, and conserve the value of land and buildings. At locations in the mapped special district, developers of new buildings were required to coordinate with the New York City Department of City Planning and MTA to determine whether MTA wished to obtain a transit easement, and if so, the developer had to provide that easement. MTA obtained several easements in buildings that were developed after the special district was mapped. However, the 2004 FEIS Design did not include station entrances in entirely the same locations as the previous, 1970s plan for the new subway, so the STLUD districts were not consistently located in appropriate places for the new subway.

4.2.1 CONSTRUCTION IMPACTS

The 2004 FEIS noted that for all four phases of construction of the Second Avenue Subway, potential temporary significant adverse impacts to land use and economic conditions could occur during construction because of temporary disruption or modification of access to buildings, altered viewscapes, limited visibility of businesses, and inconveniences for business deliveries. The 2004 FEIS stated that in the worst-case scenario, if a substantial number of businesses in an area were to close during construction, leaving street-level retail space vacant for an extended period, the character of the neighborhood could also be adversely affected. In most cases, safe access to buildings, including street-level businesses, was to be maintained throughout the construction period. However, the 2004 FEIS predicted that pedestrian and vehicular access may be altered at certain locations using sidewalk sheds and the removal of curbside parking and/or closure of travel lanes. The 2004 FEIS stated that retail establishments with outdoor activities on the sidewalk could be particularly affected. Further, whereas East Harlem is the site of substantial growth and development, the 2004 FEIS concluded that some developers may delay initiating projects in the area to avoid conflicts with the subway construction, thereby temporarily slowing commercial redevelopment. However, the 2004 FEIS anticipated that the Project would ultimately strengthen the area's attractiveness for businesses and development following completion of construction, resulting in a long-term benefit.

The 2004 FEIS noted that where properties would be acquired, and businesses or residences displaced temporarily, public sector revenues generated by those properties (e.g., real estate taxes, water and sewer payments, etc.) would decrease. It concluded that this would result in adverse fiscal effects that would be temporary, since these properties would likely be reoccupied after completion of construction. In fact, according to the 2004 FEIS, the areas are likely to become more desirable locations for business due to the presence of the subway and the resulting improvements in transit service.

Specific to each station area for Phase 2, the following potential impacts were identified:

- 106th and 116th Street Station Areas: The area between 105th and 110th Streets (including the proposed 106th Street Station) consists of a mix of low-rise buildings and large, high-rise residential complexes. Cut-and-cover construction work was identified for this area, which was to result in temporary land use and neighborhood character impacts. This was also to be true for the area around the 116th Street station. While there would be access limitations and alterations in these areas, the Project was to develop plans to ensure that access to businesses and residents are maintained throughout the construction period.
- 125th Street Curve: Tunneling activities were to be below ground, but some construction activities were to still be visible and disruptive due to the potential need to reinforce several buildings at the curve. A construction staging area was also identified in the 2004 FEIS at the 125th Street curve.
- 125th Street Station Area: This is an area that sees substantial commercial activity and depends on high levels of pedestrian activity. The 2004 FEIS noted that cut-and-cover construction in this area was to result in limited pedestrian and vehicular access, which was to be communicated to businesses in advance. Cut-and-cover construction was anticipated along portions of 125th Street from Park Avenue to Third Avenue for up to five years. The 2004 FEIS identified that community facilities, such as a nursing home on 125th Street near Park Avenue and the Manhattan Eye, Ear, and Throat Hospital on 125th Street between Park and Madison Avenues, would need to have access maintained. MTA was to coordinate with each facility to develop access plans. Construction could also limit economic revitalization efforts of local Business Improvement Districts (BID), such as the 125th Street BID. MTA was to work closely with the BID and other related business organizations, as well as other community groups to disseminate information about construction activities and receive input.
- **125th Street Tail Tracks**: The tunnel for the 125th Street tail tracks from Park Avenue to west of Fifth Avenue was to be excavated with a TBM, but some cut-and-cover construction was to potentially be needed for a TBM retrieval shaft within the 125th Street right-of-way.

The 2004 FEIS disclosed the potential economic benefits of subway construction for all construction phases. As a result of direct expenditures, the direct employment from construction activities of the full-length subway was an estimated 22,500 person-years of employment, based on an overall construction cost of \$13.0 billion in 2003 dollars. Specific to East Harlem, the neighborhood was predicted to benefit from a large construction worker population in the area, bringing new spending potential, which could result in additional sales for local businesses. The completed Second Avenue Subway would result in greater economic activity due to increased accessibility; however, the construction period would likely cause some temporary decline in business for the area, particularly for businesses that rely on high visibility and steady pedestrian and vehicular traffic.

The 2004 FEIS reported that potential adverse effects to neighborhood character during construction would include disruptions to access of residential and commercial buildings and travel patterns, as well as increases in truck traffic, noise, vibration, and dust. At the time of the 2004 FEIS, the specific duration of construction had not been determined. In several locations, longer term construction activities were identified in places where staging and managing of the construction of the Project's below-ground tunnels would occur, including locations along Second Avenue north of 125th Street to the Harlem River for the potential storage tracks, and along 125th Street between Park and Third Avenues. Temporary visual effects from barriers and construction equipment (including nighttime lighting) were also expected to adversely affect the neighborhood character and visual environment of the surrounding area during construction. To address potential rodent infestation, a rodent control program was to be incorporated into construction contract documents.

The 2004 FEIS described a variety of measures that would be employed during construction to mitigate the adverse impacts on social and economic conditions associated with the project's construction activities. These included the following:

- An extensive community outreach program with meetings, newsletters, and a web site. In addition, the 2004 FEIS called for a project office to be established at one or more locations along the alignment with a 24-hour telephone hotline;
- A community task force to provide citizen input on construction effects;
- The posting of subway construction information, possibly including detailed maps showing locations where pedestrian, bicycle, or wheelchair access might be difficult;
- Promoting high-quality design of sidewalk sheds, such as the addition of windows, better lighting, and good store signage at the subway's construction sites;
- Coordination with businesses to address access/delivery issues and provide special loading
 and unloading areas on nearby side streets to locations where access would be curtailed in
 front of buildings during construction, which might result in the prohibition of parking on the
 designated side streets;
- Limiting certain disruptive activities, such as vertical blasting, at night;
- Temporarily relocating spaces for displaced park activities, or other appropriate mitigation for open spaces, as appropriate.
- Erecting screens to limit nighttime lighting from construction areas; and
- Managing trucking activities at construction sites to avoid unnecessary queues.

4.2.2 PERMANENT IMPACTS

The 2004 FEIS did not identify any significant adverse impacts along the Phase 2 alignment to land use and economic conditions, neighborhood character, or populations that would result from the completed Second Avenue Subway. It identified beneficial effects relating to supporting economic growth as a result of improved transit access to East Harlem, as well as improved transit access from East Harlem to other employment centers throughout the city.

4.3 UPDATE OF BACKGROUND CONDITIONS

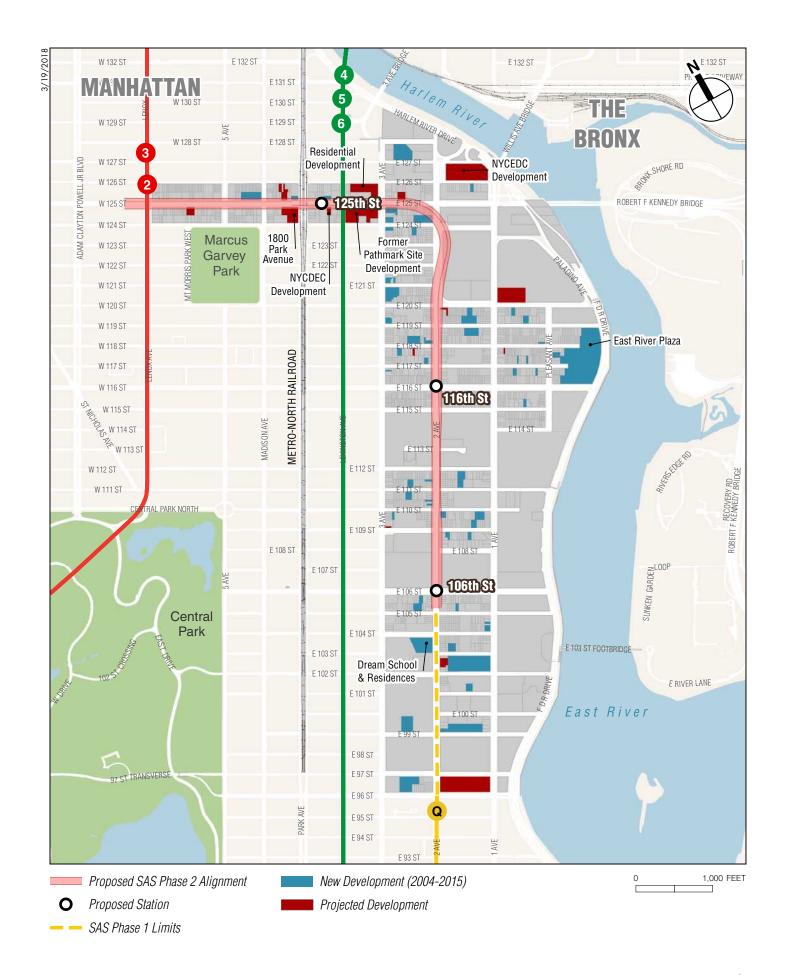
Much of the development predicted in the 2004 FEIS has occurred, and there have also been many completed or planned developments that were not foreseen in the 2004 FEIS. The 125th Street

corridor, in particular, has been and continues to be a focus of much of the new development and continues to strengthen its position as a retail and economic hub in Harlem. In 2008, New York City implemented a rezoning of the 125th Street corridor between Broadway and Second Avenue, which allowed for large commercial development to enhance 125th Street's viability as a retail hub within Harlem. As a result of that rezoning, new retail development occurred along 125th Street, including the introduction of stores housing national retailers.

Figure 4-1 shows areas of new and planned development near the proposed alignment of Phase 2. Major development has included a mix of mid- and high-rise residential buildings; large commercial developments, such as the East River Plaza along the FDR Drive at 116th Street; and institutional uses, such as the Dream School on Second Avenue at 104th Street and the Harlem Children's Zone & Promise Academy on 125th Street at Madison Avenue. Despite this development, the overall land use pattern in East Harlem has not changed substantially but the new residential and commercial development has resulted in population growth and increased density. Current land use within the East Harlem neighborhood is shown in **Figure 4-2**.

In conjunction with the new development, East Harlem has experienced population growth. As shown in **Table 4-1**, the area's population as reported in the 2004 FEIS (based on the 2000 U.S. Census) was about 116,000. The population has increased approximately 4.4 percent to about 122,000 today (based on American Community Survey [ACS] 2011-2015 5-Year Estimates). **Table 4-1** also provides a comparison of socioeconomic characteristics of the neighborhood between the 2004 FEIS and today. The population of East Harlem is 86.1 percent minority (compared to 92.8 percent in 2000) and 31.4 percent of the population is identified as low-income (compared with 35.5 percent in 2000).

Continued population growth and new development is expected in East Harlem. As shown on **Figure 4-1**, major projects include a large residential and commercial structure at 1800 Park Avenue between 124th and 125th Streets; a large development at Lexington Avenue and 125th Street (at the site of a former, now vacant, Pathmark superstore); a large residential development along 126th Street between Lexington Avenue and Third Avenue; a commercial building under construction on 125th Street between Lenox Avenue and Adam Clayton Powell, Jr. Boulevard; a redevelopment sponsored by the New York City Economic Development Corporation (NYCEDC) of the full block between 126th and 127th Streets east of Second Avenue; and the conversion of a former firehouse between Park and Lexington Avenues into a new headquarters for the Caribbean Cultural Center African Diaspora Institute, also sponsored by NYCEDC. NYCDOT, in conjunction with NYCEDC and the New East Harlem Merchants Association, will implement the Park Avenue/125th Street Public Realm Project, which involves urban design and safety elements in the area around the Metro-North Harlem-125th Street Station.



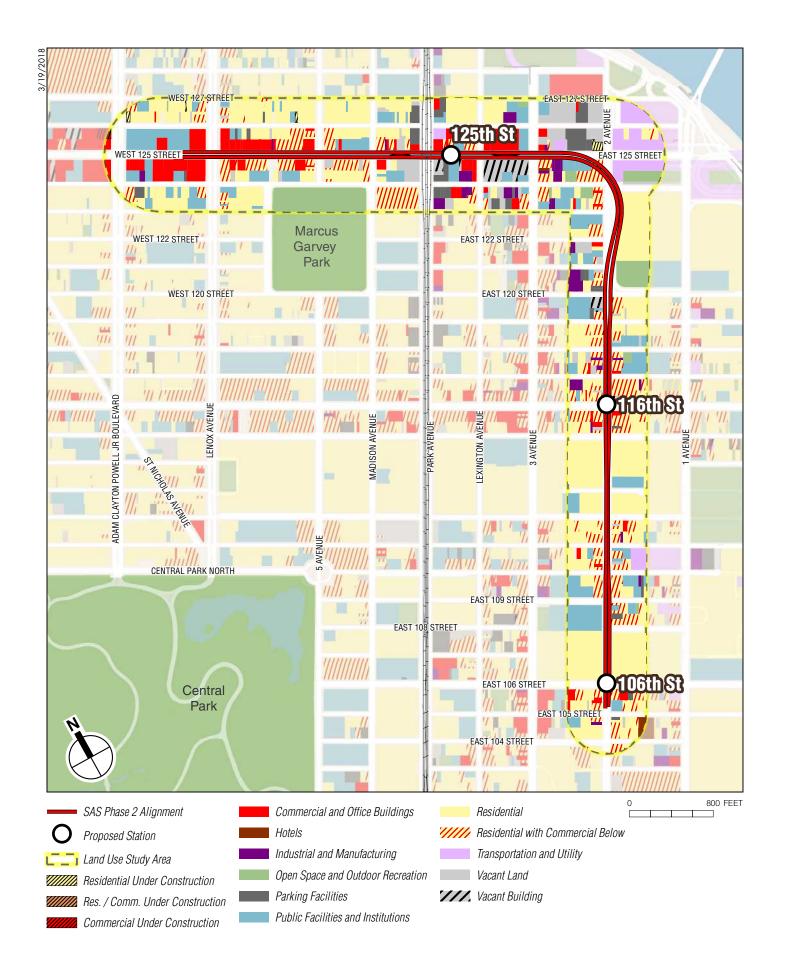


Table 4-1 Comparison of Population and Income Characteristics in the Study Area, 2004 FEIS vs. Current Conditions

	Population							Income Profile		
		Race and Ethnicity (Percent)								
Study Area	Total	and	and	Non- Hispanic and Hispanic Asian ¹	and	Hispanic ³	Total Minority ⁴	Number of House- holds	Median Household Income (\$2017)	House- holds Below Poverty (Percent) ⁵
East Harlem (2011-2015)	121,669	27.8	34.4	7.5	31.3	46.5	86.1	46,870	\$31,837	31.4
East Harlem (2000)	116,357	25.3	40.9	2.8	31.0	52.4	92.8	43,525	\$33,881	35.5
Manhattan (2011-2015)	1,629,507	56.4	15.0	11.7	16.9	25.8	52.9	750,419	\$74,904	15.6
Manhattan (2000)	1,537,195	54.4	17.4	9.4	18.9	27.2	54.2	739,167	\$71,163	16.6
New York City (2011-2015)	8,426,743	43.3	24.5	13.5	18.7	28.9	67.5	3,113,535	\$54,862	19.4
New York City (2000)	8,008,278	44.7	26.6	9.8	18.9	27.0	65.0	3,022,477	\$57,943	19.7

Notes:

- 1 White, Black, Asian, and Other population may also be Hispanic (see note 3).
- 2 "Other" includes residents of American Indian, Alaska Native, Native Hawaiian and Other Pacific Islander descent, as well as those respondents who did not identify with any listed racial groups (white, black, Asian), or who indicated that they are of more than one race than the census defines.
- 3 The Hispanic category consists of those respondents who classified themselves in one of the several Hispanic Origin categories in the American Community Survey. People of this ethnic group may be any race.
- 4 The total minority population includes all those who are not non-Hispanic White.
- 5 Percent of households with incomes below established poverty level. The U.S. Census Bureau using its established income thresholds for poverty levels defines poverty levels.

Sources: U.S. Department of Commerce, Bureau of Census, American Community Survey 2011-2015 5-Year Estimates; Second Avenue Subway FEIS.

More recently, an area-wide rezoning and related land use actions for East Harlem were approved in November 2017. The purpose of these public actions is to encourage the development of affordable housing and new commercial and manufacturing space that supports job creation, while preserving existing neighborhood character and improving the pedestrian experience. The rezoning is intended to encourage growth in areas where there is ample transit accessibility, including the planned Second Avenue Subway. The area that was rezoned extends along Second, Third, Lexington, and Park Avenues between 104th and 128th Streets, on 125th Street near Park Avenue, along 116th and 124th Streets between Second and Park Avenues, and in an area near Madison Avenue between 126th and 132nd Streets. The Final Environmental Impact Statement (FEIS) published for the East Harlem Rezoning in September 2017 reported that by 2027, existing background growth, planned projects, and new development spurred by the rezoning will result in an additional 6,600 apartments and 16,000 new residents in East Harlem, an increase of 12 percent. This area will also see an additional 523,000 square feet of new retail space and 245,000 square feet of commercial office space, bringing 3,800 new employees to East Harlem (an increase of 9 percent).

As part of the East Harlem Rezoning, the New York City Department of City Planning coordinated with MTA to revise the STLUDs mapped along Second Avenue to align with current plans for the Second Avenue Subway. STLUD overlays are now mapped in the locations of the 106th Street, 116th Street, and 125th Street Stations. In addition, the text of the New York City Zoning Resolution was revised as relates to the STLUD so that (1) floor area provided for any subway transit-related uses such as subway entrances and ancillary facilities is not considered to be zoning floor area, and therefore is not counted against the total amount of development allowed on a site; and (2) greater flexibility is available in transit easement volumes to accommodate entrances and/or ancillary facilities that meet ADA requirements, ventilation and access requirements. The STLUD text also allows MTA to obtain transit easements on vacant lots that are needed for development of the subway.

4.4 PHASE 2 MODIFIED DESIGN—CHANGES IN IMPACTS

4.4.1 CONSTRUCTION IMPACTS

The Modified Design includes ancillary facilities and entrances that would be larger than presented in the 2004 FEIS Design, for a number of design and constructability considerations, as discussed in Chapter 2, "Description of Phase 2 Modified Design."

The Modified Design also reflects efforts to reduce surface construction impacts through reduced cut-and-cover construction, particularly along 125th Street (as detailed in Chapter 2). Ancillary facilities have also been relocated from 125th Street to 124th Street, which can serve as staging areas and spoils removal sites during construction, and would also reduce construction vehicle traffic along 125th Street, minimizing disruption to traffic and retail activities along this corridor. Similar to what was described in the 2004 FEIS, these ancillary facilities would be designed to blend into the surrounding urban context of the area.

As with the 2004 FEIS Design, construction activities of Phase 2 with the Modified Design would be disruptive to the community. Construction of Phase 2 would require staging areas, cut-andcover construction for the 106th Street and 116th Street Stations, and truck traffic. For the Modified Design, the sites of ancillary facilities would be used as construction staging sites to reduce the disruption associated with using the street above the tunnel alignment for construction staging as anticipated in the 2004 FEIS Design. While construction activities for some ancillary facilities and entrances would be relocated with the Modified Design and these facilities would be larger than what was presented in the 2004 FEIS, they would be in the same general vicinity as indicated in the 2004 FEIS and would result in similar temporary impacts to land use and accessibility to buildings. Temporary adverse impacts to businesses and residences during construction of Phase 2 would be similar to those analyzed in the 2004 FEIS and similar mitigation measures would be implemented. Therefore, no changes in adverse impacts with respect to land use and economic conditions have been identified. In addition, modification of construction means and methods from cut-and-cover to mining, particularly along 125th Street, would substantially reduce surface impacts and disruption during construction to land uses and businesses in this corridor.

MTA undertook extensive community outreach during the construction of Phase 1, and it will apply the experience gained from that process as part of the planning and implementation of construction for Phase 2. The reduced cut-and-cover construction required for the 125th Street Station would reduce potential temporary impacts to neighborhood character along 125th Street.

Additionally, the modified bellmouth structure at Second Avenue and 118th Street and elimination of tail tracks along Second Avenue north to 129th Street would eliminate cut-and-cover construction in this area. However, the Modified Design would involve more intensive construction at Second Avenue near 120th Street for the new TBM staging site proposed there. Reduced cut-and-cover construction would result in less surface disruption and fewer impacts to traffic and pedestrian mobility.

While some changes in design have been proposed, no new adverse impacts to community facilities, population, or employment have been identified. Along Second Avenue, impacts would remain similar to those described in the 2004 FEIS, and the new locations of ancillaries would still be compatible with the overall urban context of the existing neighborhood character. MTA remains committed to the construction mitigation measures outlined in the 2004 FEIS and described above. A preliminary outreach plan has been developed to engage the public prior to construction, as well as during the construction period (see Chapter 20, "Public Outreach").

4.4.2 PERMANENT IMPACTS

With the Modified Design, specific locations of some proposed entrances and ancillary facilities have been revised due to constructability considerations or recent (or planned) development of larger structures on previous sites that would increase displacements, complexity of construction, and cost (see Chapter 2, "Description of Phase 2 Design Modifications"). While these locations are different than shown in the 2004 FEIS Design, they would be in the same general locations and continue to be designed to blend in with the surrounding urban context of the neighborhood. Additionally, the recent rezoning and modifications of the STLUDs along the Phase 2 alignment seeks to encourage development that is compatible with, and accommodating to, the new Second Avenue Subway facilities.

4.5 CONCLUSIONS

As a result of the Phase 2 Modified Design, there will not be any new or different significant adverse impacts on social and economic conditions not previously identified in the 2004 FEIS and ROD. Consistent with the 2004 FEIS Design, construction activities would be disruptive and result in adverse impacts to community character and may temporarily modify building access near the construction zones. Mitigation measures, as outlined in the 2004 FEIS, would be implemented to reduce adverse impacts.

While some new station entrances and ancillary facilities would be in different locations than anticipated in the 2004 FEIS, they would still be in similar locations to those previously proposed and set within the context of the urban environment of East Harlem, consistent with the conclusions of the 2004 FEIS. The Project also remains consistent with and supportive of recent local policy documents.