

16.1 INTRODUCTION

This chapter of the Supplemental Environmental Assessment (Supplemental EA) considers whether the Modified Design would result in new or different disproportionate adverse impacts on environmental justice communities not previously identified in the 2004 FEIS. The 2004 FEIS concluded that construction activities for the new Second Avenue Subway would result in significant adverse impacts along the entire alignment, including in low-income and minority (i.e., environmental justice) communities. East Harlem, where Phase 2 of the new subway will be constructed, was identified as an environmental justice community. Overall, the 2004 FEIS found that the adverse effects and benefits along the full 8.5-mile-long new subway line associated with construction and then operation of the Project would affect a wide variety of people, with no disproportionate adverse effect to low-income or minority populations. The Modified Design for Phase 2 would not change the conclusions of the 2004 FEIS.

16.2 REGULATORY CONTEXT AND METHODOLOGY

According to the U.S. Environmental Protection Agency (USEPA), “Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.” Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations” was issued in 1994 to direct federal agencies to identify and address disproportionately high and adverse human health or environmental effects of their actions on minority and low-income populations, to the greatest extent practicable and permitted by law. The executive order also stipulates that federal agencies make concerted efforts to engage environmental justice communities and provide opportunities for their participation in the environmental review process.

The Federal Transit Administration (FTA) must comply with Executive Order 12898 and uses the following guidance documents for addressing environmental justice, some of which were issued after the 2004 FEIS:

- USDOT’s Environmental Justice Order 5610.2(a) “Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” 2012;
- FTA Circular C4073.1 “Environmental Justice Policy Guidance for Federal Transit Administration Recipients,” 2012;
- Council on Environmental Quality’s (CEQ) “Environmental Justice Guidance Under the National Environmental Policy Act,” December 1997; and
- “Promising Practices for EJ Methodologies in NEPA Reviews,” report of the Federal Interagency Working Group on Environmental Justice & NEPA Committee, March 2016.

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FTA's Environmental Justice Circular 4703.1 issued in 2012 defines minorities to include American Indians or Alaskan Natives, Asian, African Americans or Black persons, Hispanic or Latino persons, and Native Hawaiians or other Pacific Islanders. In addition, minority populations may include persons who identified themselves as being either "some other race" or "two or more races" in response to the Census questionnaire. CEQ guidance defines minorities the same way as FTA, and indicates that minority populations should be identified where either: (1) the minority population of the affected area exceeds 50 percent; or (2) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis. For this preliminary assessment, block groups with minority populations of more than 50 percent are considered minority communities.

Low-income is defined by FTA to be people whose median household income is at or below the U.S. Department of Health and Human Services (HHS) poverty guidelines. FTA also encourages the use of local poverty thresholds or a percentage of median income for the area, provided that the threshold is at least as inclusive as the HHS poverty guidelines. Because HHS data is not available below the state level, this analysis uses instead the information on individuals in households below the poverty level as defined by the U.S. Census Bureau. The percent of individuals living below the poverty level in each block group, as estimated in the American Community Survey 2015 5-Year Estimates, was used. Block groups with a percentage of individuals living below the poverty level of greater than 17.9 percent, which is the percent of the population in Manhattan identified as below poverty level, are considered low-income communities.

16.3 FEIS FINDINGS

Chapter 18 of the 2004 FEIS identified the East Harlem study area as an environmental justice community, with an overall population that was 92 percent minority, notably higher than the proportion of minority population for Manhattan as a whole (54.2 percent) and New York City overall (65 percent). It also reported that approximately 35.6 percent of the households of the East Harlem study area were living below the federal poverty threshold, compared to 16.6 percent for Manhattan and 19.7 percent for New York City as a whole.

The 2004 FEIS described that the Second Avenue Subway Project would bring benefits to low-income and minority communities, including East Harlem, but its construction would result in significant adverse impacts. The 2004 FEIS also noted that these same benefits and impacts would accrue to the entire population living near the full-length Second Avenue Subway, which included environmental justice communities as well as non-environmental justice communities. Overall, the 2004 FEIS concluded that the adverse effects and benefits along the new subway line associated with construction and then operation of the Project would affect a wide variety of people, with no disproportionate adverse effect to low-income or minority populations.

Mitigation measures to limit adverse effects throughout the corridor included measures to limit disturbance during construction using barriers, dust suppression, traffic management plans, and community outreach programs. Businesses and residents who would need to be displaced for the project would be compensated as required by state and federal law. Plans would be developed for identifying suitable replacement facilities for park facilities that would need to be closed during construction, and all park spaces would be fully restored and trees replanted once the project is complete.

16.4 UPDATE OF BACKGROUND CONDITIONS

As described in Chapter 4, “Social and Economic Conditions,” the population of East Harlem based on the 2011-2015 American Community Survey (ACS) 5-Year Estimates has increased since the 2004 FEIS. While the proportion of low-income and minority residents has decreased slightly, the East Harlem area remains an environmental justice community. **Table 16-1** below provides a comparison of demographic data for East Harlem between the 2000 Census and the 2011-2015 ACS.

**Table 16-1
Comparison of Population and Income Characteristics
in the Study Area, 2004 FEIS vs. Current Conditions**

Study Area	Population							Income Profile		
	Total	Race and Ethnicity (Percent)						Number of Households	Median Household Income (\$2017)	Households Below Poverty (Percent) ⁵
		Non-Hispanic and Hispanic White ¹	Non-Hispanic and Hispanic Black ¹	Non-Hispanic and Hispanic Asian ¹	Non-Hispanic and Hispanic Other ^{1,2}	Hispanic ³	Total Minority ⁴			
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:

- White, Black, Asian, and Other population may also be Hispanic (see note 3).
- “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.
- 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.
- The total minority population includes all those who are not non-Hispanic White.
- 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*.

Figure 16-1 identifies environmental justice populations in proximity to (i.e., within ¼ mile) the Phase 2 alignment. Census block groups with greater than 50 percent minority populations and greater than 17.9 percent poverty rates are shown. As shown in the figure, all block groups within this corridor are environmental justice communities, with nearly all of them having both minority and low-income populations.

As described in Section 16.2 above, several new guidance documents have been issued since 2004 with respect to environmental justice. The USDOT’s Environmental Justice Order 5610.2(a) “Actions to Address Environmental Justice in Minority Populations and Low-Income



- SAS Phase 2 Alignment
- Environmental Justice Study Area Block Group
- 1/4-Mile Study Area
- Proposed Station
- > 50% Minority
- > 50% Minority & > 17.9% Low-Income

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Populations,” was issued in 2012; FTA Circular C4073.1, “Environmental Justice Policy Guidance for Federal Transit Administration Recipients,” was also issued in 2012; “Promising Practices for EJ Methodologies in NEPA Reviews,” report of the Federal Interagency Working Group on Environmental Justice & NEPA Committee, was issued in March 2016. The updated assessment of environmental justice communities considers these new guidance documents, as well as any still applicable previous documents.

16.5 PHASE 2 MODIFIED DESIGN—CHANGES IN IMPACTS

The Modified Design includes changes in construction means and methods, largely intended to reduce construction impacts, particularly at the 125th Street curve and along 125th Street. For example, the launch site for the Tunnel Boring Machine (TBM) would be at about 120th Street, a block south of the TBM retrieval site identified in the 2004 FEIS. The new bellmouth structure would be constructed from about 118th Street to 120th Street using cut-and-cover methods, which requires additional demolition of an existing tunnel segment constructed in the 1970s, a change from the 2004 FEIS. However, the originally proposed bellmouth location north of 120th Street would have required more substantial cut-and-cover construction to allow for a future extension to the Bronx.

Surface impacts during construction would also be reduced along 125th Street due to the deeper tunnel and station allowing for mining construction and avoiding much of the cut-and-cover construction originally anticipated. The lower profile would also provide more rock cover between the new station and the existing Lexington Avenue Station, thereby reducing the risk of impacts on the existing station and potential service disruptions on the existing Lexington Avenue (4/5/6) subway line.

The 2004 FEIS concluded that all neighborhoods along the full Second Avenue Subway alignment would experience cut-and-cover construction activities for new stations, with greater impact occurring in areas where rock is too deep to allow mined stations. Although Phase 2 is located in a low-income and minority community, the impacts of the construction activities, including cut-and-cover activity, would not be considered disproportionate in the context of all the construction activities required for the full alignment, which include cut-and-cover and other construction activities in a variety of different neighborhoods. The Modified Design would maintain cut-and-cover construction for the 106th and 116th Street Stations, but proposed construction activities along 125th Street would be modified to use mining techniques, substantially reducing cut-and-cover construction and surface impacts in this area.

The mitigation measures that were proposed in the 2004 FEIS would be implemented to limit disturbance during construction using barriers, dust suppression, traffic management plans, and community outreach programs. As with construction of Phase 1, MTA will set forth a robust community outreach plan during construction of Phase 2 to keep the community informed and to ascertain concerns of the community (see Chapter 20, “Public Outreach”). Businesses and residents who must be displaced for the project would be compensated as required by state and federal law. Compensation for property would be based on fair market value and, in the case of partial takings, diminution (if any) to the value of the remaining property in accordance with the New York State’s Eminent Domain Procedure Law. Provision of relocation services, moving payments, replacement housing payments, and other allowable payments related to commercial and residential moving costs and displacement would be in accordance with the federal Uniform Act. Plans will be developed for identifying suitable replacement facilities for park facilities that

must be closed during construction, if applicable, and all park spaces would be fully restored and trees replanted once the project is complete. Therefore, as with the Project that was analyzed in the 2004 FEIS, the 2017 Modified Design would not be expected to result in any disproportionate adverse impacts on minority or low-income populations. Additionally, overall, the new subway would have a positive effect on the communities where it operates, including those with low-income and minority populations, by providing enhanced access to transit services.

16.6 CONCLUSIONS

Consistent with the 2004 FEIS, the full-length Project including the Modified Design would not result in disproportionately high and adverse effects on environmental justice communities. Measures have been taken to reduce surface construction by impacts by reducing cut-and-cover construction, particularly along 125th Street. Mitigation measures as described in the 2004 FEIS would continue to be implemented to minimize adverse impacts to the community during construction. The Project would ultimately provide a benefit to the community through enhanced accessibility to transit services. Therefore, the Phase 2 Modified Design would not result in any new or different disproportionate adverse impacts on environmental justice communities not previously identified in the 2004 FEIS and ROD. *