

17 Environmental Justice

17.1 INTRODUCTION

This chapter presents an analysis of the potential effects of the CBD Tolling Alternative on low-income and minority populations (collectively, environmental justice populations) and provides an analysis of whether the Project would result in disproportionately high and adverse effects on low-income and minority populations. The analysis in this chapter is based on the conclusions of the other analyses presented in previous chapters of this EA as well as concerns raised during the extensive public outreach that FHWA and the Project Sponsors conducted for the Project during preparation of this EA. **Appendix 17, “Environmental Justice,”** provides more detailed information on the methodology used to conduct this analysis.

17.2 REGULATORY CONTEXT

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (February 11, 1994), directs Federal agencies to identify and address, as appropriate, disproportionately high and adverse effects of Federal actions on minority and low-income populations. Its purpose is to focus Federal attention on the environmental and human health effects of Federal actions on minority and low-income populations with the goal of achieving environmental protection for all communities. FHWA defines environmental justice as identifying and addressing disproportionately high and adverse effects of the agency’s programs, policies, and activities on minority populations and low-income populations to achieve an equitable distribution of benefits and burdens. This also includes the full and fair participation by all potentially affected environmental justice populations in the transportation decision-making process.¹

The following Federal regulatory and guidance documents were used for the environmental justice analysis:

- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (February 1994)²
- U.S. Department of Transportation (USDOT) Order 5610.2C, Department of Transportation Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (May 2021)³
- USDOT, Environmental Justice Strategy (November 2016)⁴
- FHWA Order 6640.23A, FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (June 2012)⁵

¹ https://www.fhwa.dot.gov/Environment/environmental_justice/.

² <https://www.archives.gov/files/federal-register/executive-orders/pdf/12898.pdf>.

³ <https://www.transportation.gov/sites/dot.gov/files/Final-for-OST-C-210312-003-signed.pdf>.

⁴ <https://www.transportation.gov/transportation-policy/environmental-justice/environmental-justice-strategy>.

⁵ <https://www.fhwa.dot.gov/legsregs/directives/orders/664023a.cfm>.

- FHWA, Guidance on Environmental Justice and the National Environmental Policy Act (NEPA) (December 2011)⁶
- FHWA, Environmental Justice Reference Guide (April 2015)⁷
- Federal Interagency Working Group on Environmental Justice & NEPA Committee, Promising Practices for Environmental Justice Methodologies in NEPA Reviews (March 2016)⁸

17.3 METHODOLOGY

17.3.1 Overview

This chapter evaluates the potential for disproportionately high and adverse effects to environmental justice populations, consistent with FHWA's 2011 *Guidance on Environmental Justice and NEPA*, USDOT Order 5610.2C, and FHWA Order 6640.23A. FHWA and the Project Sponsors conducted extensive public outreach, including outreach targeted to environmental justice populations, during preparation of the EA. The following methodology was used to conduct the environmental justice analysis:

1. Review Project effects to identify appropriate study areas for analysis of environmental justice (**Section 17.4**).
2. Identify existing minority and low-income (environmental justice) populations in the study areas (**Section 17.5**).
3. Determine whether the Project would result in beneficial and/or adverse effects on the identified environmental justice populations. This includes consideration of measures to avoid, minimize, and/or mitigate any adverse effects of the Project as well as potential offsetting benefits to the affected environmental justice populations (**Section 17.6**). Input from environmental justice populations regarding potential issues of concern and mitigation measures is an important part of this step.
4. Identify whether the Project would result in disproportionately high and adverse effects on environmental justice populations (**Section 17.7**). These are effects that would be predominately borne by environmental justice populations or are appreciably more severe or greater in magnitude on environmental justice populations than the adverse effect suffered by the non-minority or non-low-income population.
5. If disproportionately high and adverse effects on environmental justice populations are anticipated, evaluate whether there is a further practicable mitigation measure or practicable alternative that would avoid or reduce the disproportionately high and adverse effects (**Section 17.8**).
6. Provide meaningful opportunities for environmental justice populations to provide input on the Project (**Section 17.10**).

⁶ https://www.environment.fhwa.dot.gov/env_topics/ej/guidance_ejustice-nepa.aspx.

⁷ https://www.fhwa.dot.gov/environment/environmental_justice/publications/reference_guide_2015/index.cfm.

⁸ The Project Sponsors reviewed this document in developing the analysis but used the guidance set forth in FHWA's 2011 Environmental Justice and NEPA. https://www.epa.gov/sites/production/files/2016-08/documents/nepa_promising_practices_document_2016.pdf.

17.3.2 Data Sources

The environmental justice analysis is based on the conclusions of the other chapters of this EA, in combination with supplemental data on environmental conditions and information from the U.S. Census Bureau, as follows:

- Information on the effects of the CBD Tolling Alternative is based on the conclusions of the other analyses presented in this EA. These conclusions were informed, in part, by concerns raised by the public during early public outreach for the Project in fall 2021.
- Areas where residents are minority and/or low-income were identified using data from the U.S. Census Bureau 2015–2019 American Community Survey (ACS) 5-Year Estimates. The 2015–2019 ACS 5-Year Estimates is the most current full set of demographic information, including racial and ethnic characteristics and household income and poverty status, available from the U.S. Census Bureau at the census tract level. The 2020 Census information now available does not include a full set of information.
- Socioeconomic characteristics of the traveling public, including minority and/or low-income populations, were based on data from the U.S. Census Bureau’s Census Transportation Planning Package (CTPP). The CTPP provides special tabulations, based on the U.S. Census Bureau ACS 5-Year Estimates, that are useful for transportation planning, including commuter flow data at varying geographic scales by mode of commute and household income. The CTPP data include information on commuter patterns for a range of income levels. The most recent CTPP is based on the 2012–2016 ACS 5-Year Estimates and has not been updated to reflect more recent ACS data.
- Conclusions about the effects of the CBD Tolling Alternative on low-income and/or minority populations and potential measures to avoid, minimize, or mitigate those effects were informed by the early public outreach for the Project in fall 2021. That outreach included public webinars to engage with environmental justice populations throughout the 28-county region, coordination with an Environmental Justice Technical Advisory Group, and meetings with an Environmental Justice Stakeholder Working Group (see **Section 17.10**).

17.4 ENVIRONMENTAL JUSTICE STUDY AREAS

The environmental justice analysis evaluates two types of potential effects of the CBD Tolling Program, neighborhood effects and regional effects:

- **Local (Neighborhood) Effects:** These are effects on local communities. Based on the conclusions of the other chapters of this EA, the potential neighborhood effects of the CBD Tolling Alternative would be primarily related to diverted trips and changes in traffic patterns, and the potential resulting effects in terms of traffic congestion, air emissions, and noise.
- **Regional Effects:** These are effects on regional mobility. The analysis considers how implementation of the CBD Tolling Alternative would affect the regional population in terms of increased costs (tolls), changes in trip time, and changes in transit conditions.

The information presented in **Chapters 4 through 15** of this EA and summarized in **Chapter 16, “Summary of Effects”** (see **Table 16-1**) describe the local and regional effects of implementation of the CBD Tolling Alternative on the general population and identify potential adverse effects and measures to avoid, minimize, or mitigate those effects. FHWA and the Project Sponsors reviewed those conclusions as well as concerns raised during public outreach for the Project to determine what Project effects have the potential to affect environmental justice populations. This informed selection of study areas for the environmental justice analysis, as discussed in **Sections 17.4.1 and 17.4.2**, and the topics to be considered in the analysis (see **Section 17.6**).

In addition, during public outreach conducted for the Project in fall 2021 (see **Section 17.10**), members of the public raised a number of concerns related to the Project’s potential for effects on environmental justice populations, and FHWA and the Project Sponsors reviewed those concerns and included them in the analysis of environmental justice presented in this chapter:

- **Potential Project Effects on Traffic, Air Quality, and Noise Near Environmental Justice Neighborhoods:** Participants in public webinars and meetings of the Environmental Justice Stakeholder Working Group and Environmental Justice Technical Advisory Group raised concerns that the CBD Tolling Alternative would divert traffic to circumferential highways around the Manhattan CBD and that these additional vehicles would adversely affect the nearby neighborhoods, including by degrading air quality and increasing noise. Participants also commented that the Project would affect local traffic volumes and potentially air quality and noise, in environmental justice neighborhoods, including on the Lower East Side in the Manhattan CBD and in the South Bronx outside the Manhattan CBD. **Section 17.6.1** of this chapter presents the results of the detailed analysis the Project Sponsors conducted of these issues (see **Sections 17.6.1.1, 17.6.1.2, 17.6.1.3, and 17.6.1.4**).

In response to comments during the fall 2021 outreach, the Project Sponsors expanded the analyses of traffic, air quality, and noise to include additional locations in environmental justice neighborhoods where concerns were raised, more detailed evaluation of changes in truck volumes on highways and local roadways, and more detailed evaluation of air pollutants of concern in the air quality evaluation. In addition, the Project Sponsors added a tolling scenario for analysis throughout the EA, Tolling Scenario G, to evaluate opportunities for reducing truck diversions that would result from the CBD Tolling Alternative.

In addition, as a result of comments received during public outreach related to air quality concerns, MTA will prioritize two bus depots that serve environmental justice populations in Upper Manhattan and the South Bronx for the transition of MTA New York City Transit’s (NYCT) bus fleet to zero-emissions buses (see **Section 17.6.1.3**).

- **Potential Effects of the Project on Bus Ridership:** Participants in the early outreach commented that the Project has the potential to overburden local bus service as people shift from automobile to public transportation to avoid the toll. The EA includes a detailed analysis of the effects of the Project on public transportation ridership throughout the region, including on bus routes that serve environmental justice neighborhoods. **Section 17.6.1.5** provides information on the results of the analysis.

- **Potential for Indirect Displacement of Low-Income Residents in the Manhattan CBD:** The Environmental Justice Technical Advisory Group raised concerns about the potential involuntary displacement of environmental justice populations. They stated a concern that the CBD Tolling Alternative would attract new middle- and upper-income residents to the Manhattan CBD because of its proximity to transit and reduced vehicle congestion, allowing the new residents to avoid paying the toll. Commenters believed that this would put upward pressure on rents, forcing low-income residents to move to more affordable locations outside the Manhattan CBD. They also expressed concern about the potential increase in the cost of goods for Manhattan CBD and how this might affect the cost of living for low-income residents in the Manhattan CBD (see the next item in this discussion). **Section 17.6.1.8** provides an analysis of the potential for indirect displacement.
- **Potential Effects on the Cost of Goods in the Manhattan CBD:** During public outreach for the Project related to environmental justice, the Environmental Justice Technical Advisory Group raised concerns about the potential for the introduction of a new CBD toll to affect the price of consumer goods in the Manhattan CBD if the costs of new tolls on commercial vehicles would be passed on to customers. **Section 17.6.1.9** provides summarizes the conclusions related to this issue.
- **Increased Cost of Travel to the Manhattan CBD for Low-Income Drivers:** Speakers at the environmental justice webinars and members of the Environmental Justice Technical Advisory Group and Environmental Justice Stakeholder Working Group expressed concerns about increased costs for low-income drivers traveling to the Manhattan CBD. This included concerns related to potential adverse effects on community cohesion and access to the Manhattan CBD as well as the effect of increased costs for low-income drivers who commute to work in the Manhattan CBD. See **Section 17.6.2.1**.

17.4.1 Local Study Area

Based on the review of Project effects identified in other chapters of the EA, most of the potential effects of the CBD Tolling Alternative on environmental justice populations would be local effects. **Appendix 17, “Environmental Justice,”** provides more detail on the conclusions of the EA and how issues were evaluated for consideration in this environmental justice analysis. To evaluate the local effects on environmental justice populations, the Project Sponsors used a 10-county local study area consisting of New York City and the five adjacent counties where the greatest change in traffic volumes and vehicle-miles traveled (VMT) are predicted to occur (**Figure 17-1**). This local study area is the area where localized effects (such as changes in traffic volumes, air emissions, or noise) would occur as a result of the Project. This 10-county study area includes the following:

- Bronx County, New York
- Kings County (Brooklyn), New York
- New York County (Manhattan), New York
- Queens County, New York
- Richmond County (Staten Island), New York
- Nassau County, New York
- Bergen County, New Jersey
- Essex County, New Jersey

- Hudson County, New Jersey
- Union County, New Jersey

17.4.2 Regional Study Area

For consideration of the effects of the new toll on people who travel throughout the region, the Project Sponsors used a larger, regional study area (see **Figure 17-1**). The regional study area is the main catchment area for trips to and from the Manhattan CBD and the area where changes in travel patterns and mobility would occur. The 28-county regional study area, which is the same regional study area used in other chapters of the EA, includes the following:

- New York City (Bronx, Kings [Brooklyn], New York [Manhattan], Queens, and Richmond [Staten Island] Counties)
- Long Island (Nassau and Suffolk Counties)
- New York counties north of New York City (Dutchess, Orange, Putnam, Rockland, and Westchester)
- New Jersey counties (Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union, and Warren)
- Connecticut counties (Fairfield and New Haven)

17.5 EXISTING MINORITY AND LOW-INCOME POPULATIONS IN THE ENVIRONMENTAL JUSTICE STUDY AREAS

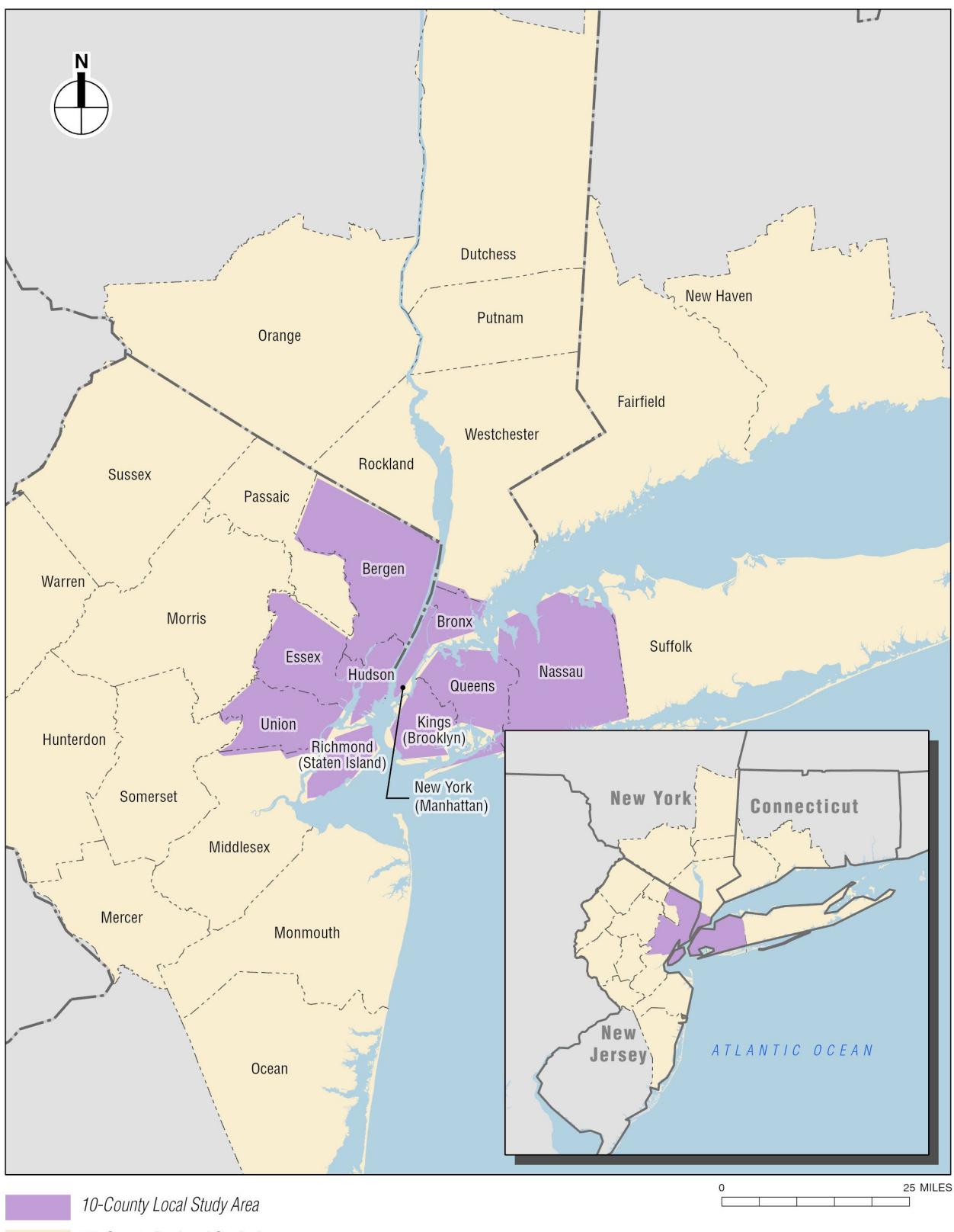
17.5.1 Defining Minority and Low-Income Populations

USDOT Order 5610.2C and FHWA Order 6640.23A define minority and low-income populations as follows:

- **Minority:** A person who is Black or African American (not Hispanic), American Indian and Alaskan Native, Asian American, Native Hawaiian or other Pacific Islander, and Hispanic or Latino. This analysis also includes people who identified themselves as “some other race” or “two or more races” in the U.S. Census. In addition, *minority population* is any readily identifiable groups of minority persons who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons who will be similarly affected by a proposed FHWA program, policy, or activity.
- **Low-Income:** A person whose household income is at or below the U.S. Department of Health and Human Services poverty guidelines.⁹ In addition, a *low-income population* is any readily identifiable groups of low-income persons who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons who will be similarly affected by a proposed FHWA program, policy, or activity.

⁹ The analysis for this Project used information related to the annual poverty threshold established by the U.S. Census Bureau rather than the U.S. Department of Health and Human Services poverty guidelines. The Health and Human Services poverty guidelines are a simplified version of those Federal poverty thresholds that are used for administrative purposes—for instance, determining financial eligibility for certain Federal programs.

Figure 17-1. Environmental Justice Study Areas



Source: ArcGIS Online, <https://www.arcgis.com/index.html>.

For the analysis of the local (neighborhood) study area, the following approach was used to identify minority and low-income populations (for more information, see **Appendix 17, “Environmental Justice”**):

- Census tracts in the local study area were considered to be **minority** when either: (1) at least 50 percent of the census tract’s population identifies as minority; or (2) the percentage of population identifying as minority in the census block group exceeds the share of minority population in the county where that census tract is located.
- Census tracts in the local study area were considered to be **low-income** when the percentage of individuals with household incomes up to twice the Federal poverty threshold in the census tract was higher than that percentage for the 28-county region.¹⁰ The Project Sponsors in consultation with FHWA identified this income threshold, rather than using the lower Federal poverty threshold, to reflect local conditions and the cost of living in the study area (see **Appendix 17, “Environmental Justice,”** for more information).

For evaluation of the potential effects on people who travel throughout the region (i.e., commuters, travelers, or individuals in specific industries, businesses, or other groups that could be affected by increased cost associated with accessing the Manhattan CBD), the following approach was used to identify minority and low-income populations:

- **Minority** populations who commute to work in the Manhattan CBD were identified based on census information available in the CTPP.
- **Low-income** populations who commute to work in the Manhattan CBD were identified based on information available in the CTPP related to worker flows by mode and household income. A household income threshold of \$50,000 was used to identify low-income drivers, since no data are available on workers who have household incomes of up to twice the poverty threshold. This is approximately equivalent to, although higher than, the low-income threshold of twice the Federal poverty threshold for a three-person family, consistent with the average household size for the Project study area of 2.8 people per household.¹¹

17.5.2 Environmental Justice Populations in the Local Study Area

The local study area includes the Manhattan CBD and the surrounding area that is most likely to be affected by changes in traffic volumes resulting from the CBD Tolling Alternative.

Approximately 617,00 residents live in the Manhattan CBD, with a wide range of income levels and racial and ethnic characteristics. The Manhattan CBD includes a number of different neighborhoods, which the New York City Department of City Planning combines together into neighborhood groupings for analysis purposes. These are illustrated in **Figure 17-2**. As shown in **Figure 17-2**, the Manhattan CBD includes areas

¹⁰ For this analysis, the Project Sponsors used data from the U.S. Census on the number of individuals in each census tract with household incomes up to 1.99 times the Federal poverty threshold. For simplicity, this chapter refers to that information as twice the Federal poverty threshold.

¹¹ The average household size is 2.8 people per household in New York City, the 10-county study area, and the 28-county regional study area.

with environmental justice census tracts, generally located in the Chinatown, Lower East Side, and Clinton neighborhoods, with additional tracts in other neighborhoods.

Outside the Manhattan CBD, the rest of the local study area includes more than 300 different neighborhoods and local communities. **Figure 17-3** provides an overview of the local study area and **Appendix 17, “Environmental Justice,”** provides additional, more detailed maps and information for each of these neighborhoods. As **Figure 17-3** illustrates, most census tracts in the area immediately surrounding the Manhattan CBD are environmental justice census tracts. **Table 17-1** provides a summary of the population characteristics of the local study area.

17.5.3 Environmental Justice Populations in the Regional Study Area

17.5.3.1 *Regional Overview*

Minority and low-income populations live throughout the regional study area, which consists of 28 counties around and including New York City. As shown in **Figure 17-4**, environmental justice census tracts are predominantly located close to New York City in the area that constitutes the local study area. **Table 17-2** shows the population characteristics of the regional study area.

Table 17-1. Population Characteristics of the Local Study Area

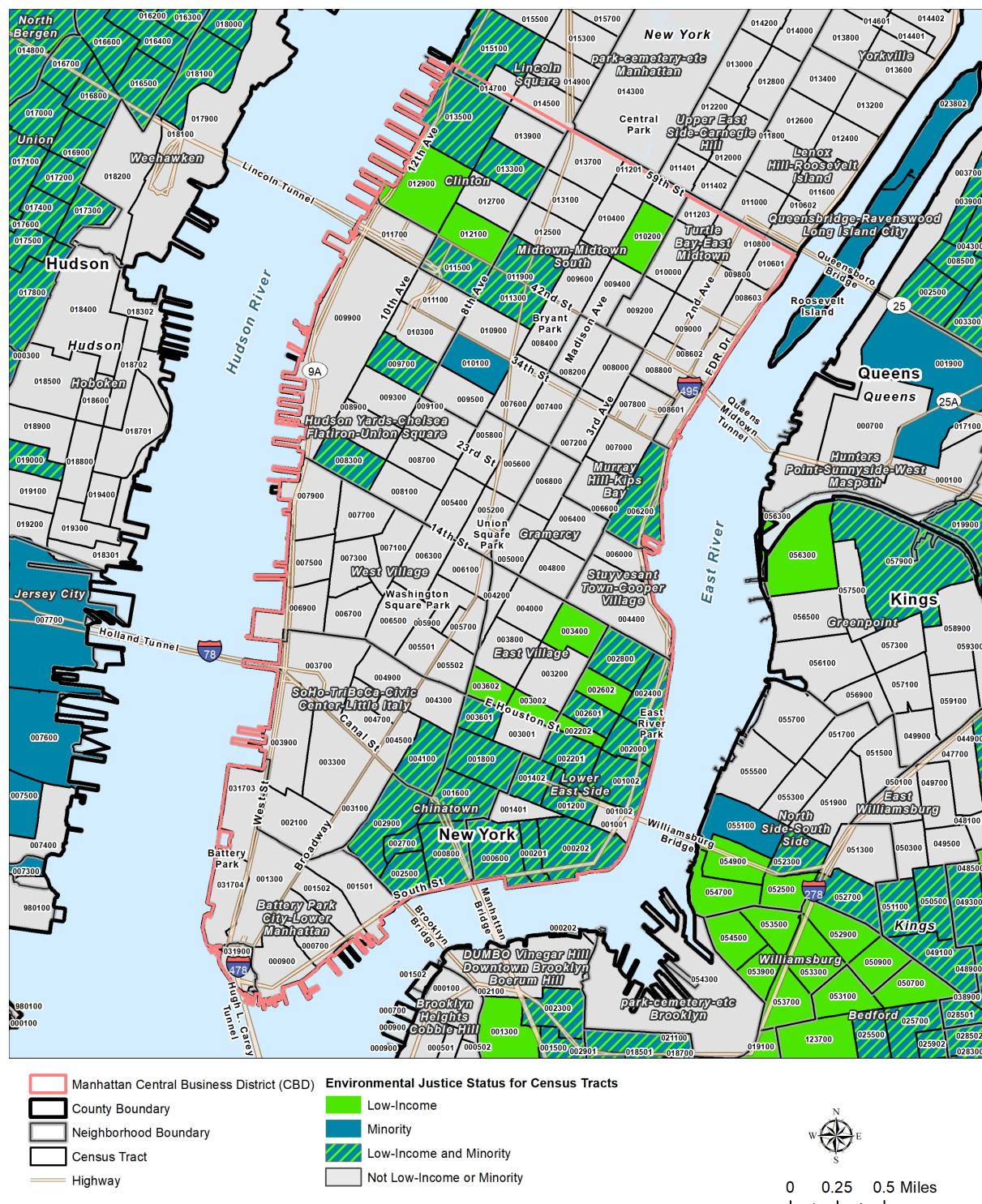
GEOGRAPHIC AREA	TOTAL POPULATION	ASIAN (NON-HISPANIC)	BLACK (NON-HISPANIC)	OTHER (NON-HISPANIC)	HISPANIC OR LATINO	WHITE (NON-HISPANIC)	% MINORITY	% LOW-INCOME
Bronx County	1,435,068	3.6%	29.2%	2.0%	56.0%	9.1%	90.9%	51.0%
Kings County (Brooklyn)	2,589,974	11.8%	30.0%	2.8%	19.0%	36.4%	63.6%	39.1%
New York County (Manhattan)	1,631,993	12.1%	12.5%	2.7%	25.8%	46.9%	53.1%	28.9%
Queens County	2,287,388	25.3%	17.2%	4.4%	28.0%	25.0%	75.0%	31.0%
Richmond County (Staten Island)	474,893	9.2%	9.4%	2.0%	18.4%	61.0%	39.0%	23.0%
Nassau County	1,356,509	9.6%	11.1%	2.4%	16.9%	60.0%	40.0%	14.5%
Bergen County	930,390	16.2%	5.3%	2.0%	19.9%	56.6%	43.4%	16.1%
Essex County	795,404	5.3%	38.4%	2.7%	23.0%	30.5%	69.5%	33.3%
Hudson County	670,046	15.0%	10.5%	2.6%	43.1%	28.8%	71.2%	32.8%
Union County	554,033	5.0%	20.1%	3.8%	31.6%	39.5%	60.5%	24.8%
TOTAL	12,725,698	1,628,214 (12.8%)	2,525,656 (19.8%)	365,709 (2.9%)	3,509,208 (27.6%)	4,696,911 (36.9%)	63.1%	31.4%

Source: U.S. Census Bureau, ACS 2015–2019 5-Year Estimates.

Notes:

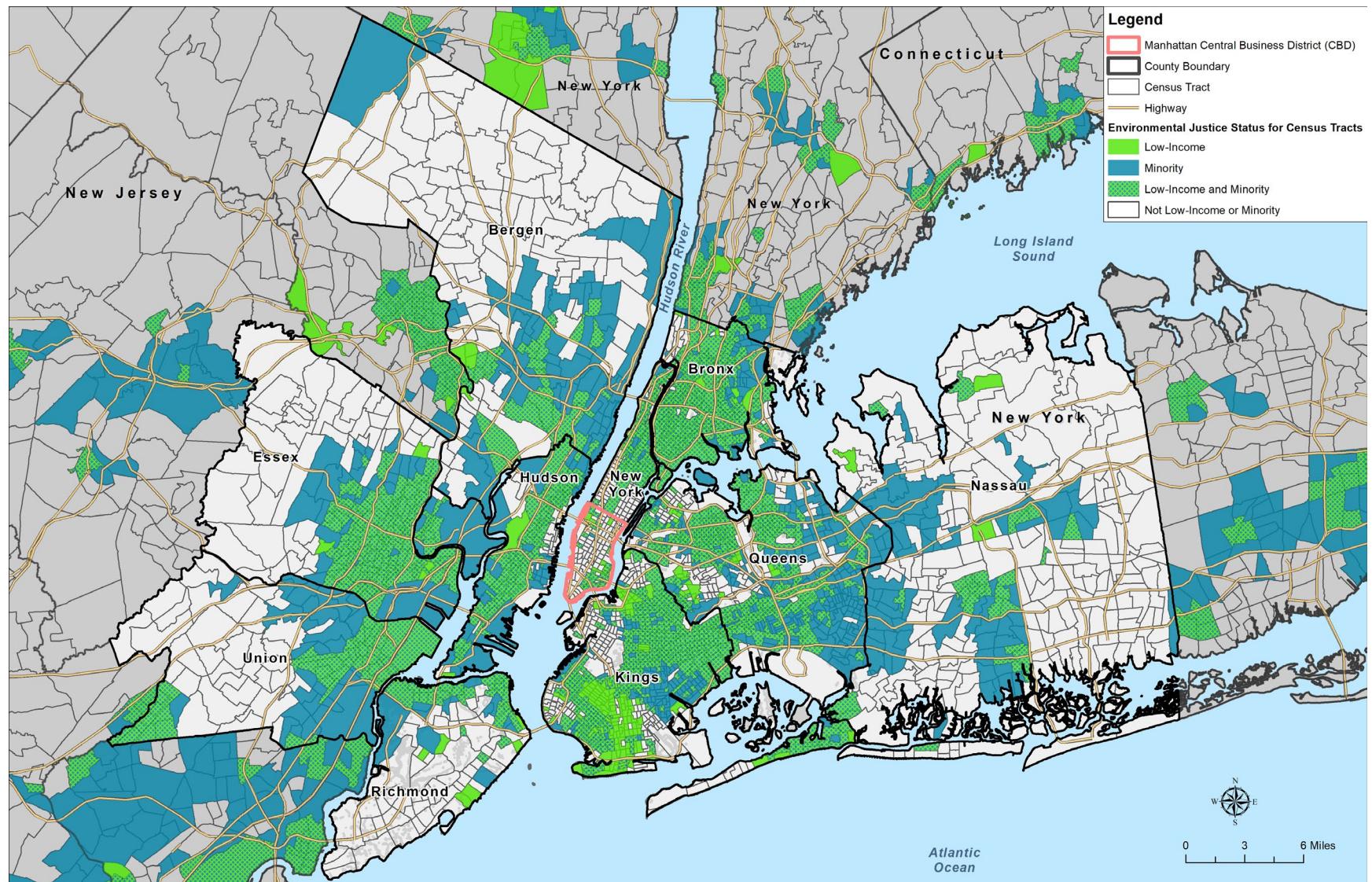
1. Percentages may not add to 100 percent due to rounding.
2. Other includes the census categories of American Indian and Alaska Native, Native Hawaiian or other Pacific Islander, Some Other Race, and Two or More Races. People of any race may also be Hispanic.
3. Total minority percentage consists of all population other than non-Hispanic White people.
4. Low-income population is population with annual household incomes of up to twice (1.99 times) the Federal poverty threshold.

Figure 17-2. Environmental Justice Census Tracts in the Manhattan CBD



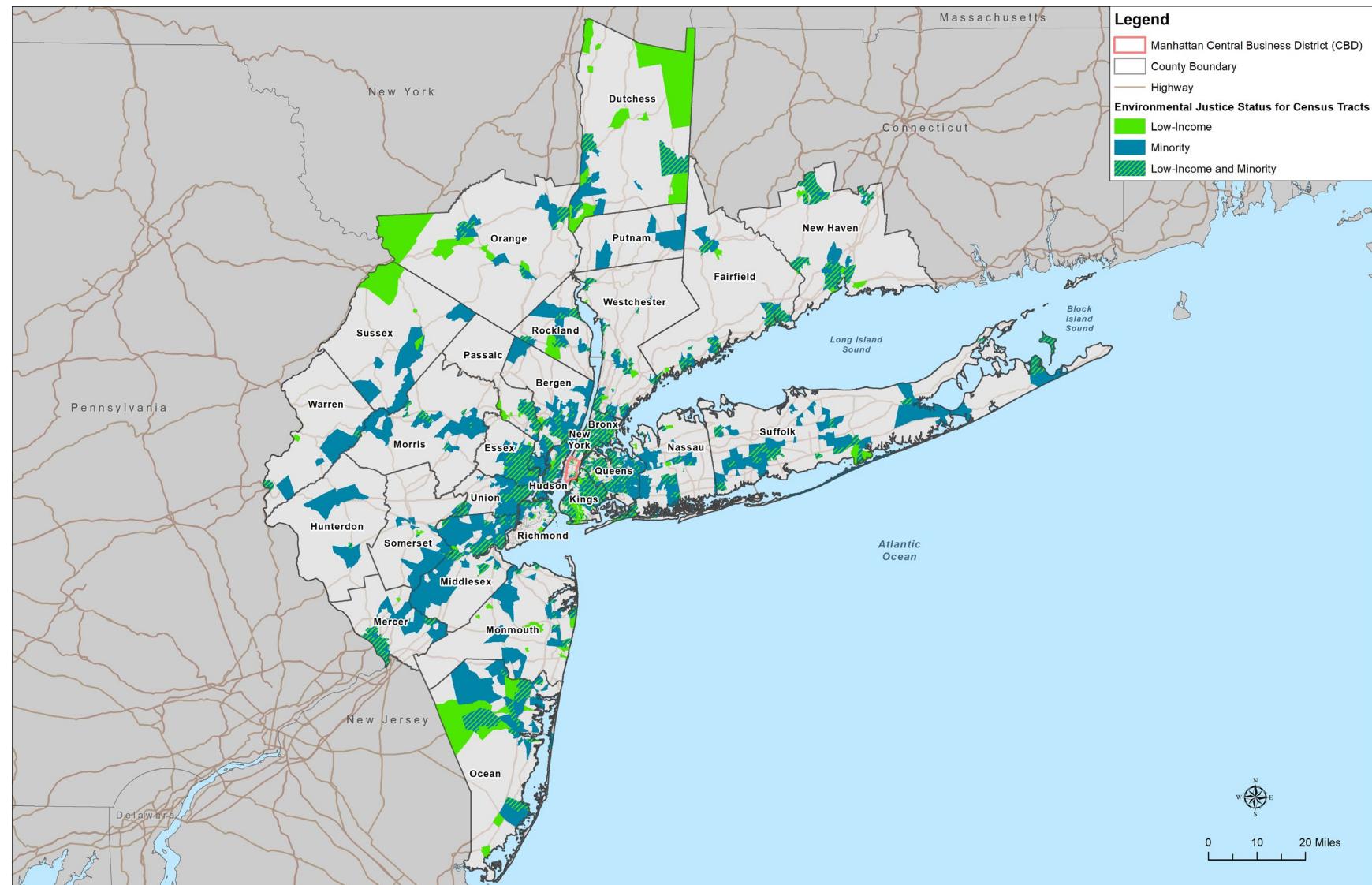
Source: U.S. Census Bureau ACS 2015–2019 5-Year Estimates.

Figure 17-3. Environmental Justice Census Tracts in the Local Study Area



Source: U.S. Census Bureau ACS 2015–2019 5-Year Estimates.

Figure 17-4. Environmental Justice Census Tracts in the Regional Study Area



Source: U.S. Census Bureau ACS 2015–2019 5-Year Estimates

Table 17-2. Population Characteristics of the Regional Study Area

GEOGRAPHIC AREA	TOTAL POPULATION	ASIAN (NON-HISPANIC)	BLACK (NON-HISPANIC)	OTHER (NON-HISPANIC)	HISPANIC OR LATINO	WHITE (NON-HISPANIC)	% MINORITY	% LOW-INCOME
New York City	8,419,316	1,176,762 (14.0%)	1,837,549 (21.8%)	254,857 (3.0%)	2,447,862 (29.1%)	2,702,286 (32.1%)	67.9%	36.0%
Bronx County	1,435,068	3.6%	29.2%	2.0%	56.0%	9.1%	90.9%	51.0%
Kings County (Brooklyn)	2,589,974	11.8%	30.0%	2.8%	19.0%	36.4%	63.6%	39.1%
New York County (Manhattan)	1,631,993	12.1%	12.5%	2.7%	25.8%	46.9%	53.1%	28.9%
Queens County	2,287,388	25.3%	17.2%	4.4%	28.0%	25.0%	75.0%	31.0%
Richmond County (Staten Island)	474,893	9.2%	9.4%	2.0%	18.4%	61.0%	39.0%	23.0%
Long Island Counties	2,840,341	187,841 (6.6%)	258,946 (9.1%)	61,423 (2.2%)	515,858 (18.2%)	1,816,273 (63.9%)	36.1%	15.6%
Nassau County	1,356,509	9.6%	11.1%	2.4%	16.9%	60.0%	40.0%	14.5%
Suffolk County	1,483,832	3.9%	7.3%	2.0%	19.3%	67.6%	32.4%	16.7%
New York Counties North of New York City	2,065,938	98,893 (4.8%)	236,310 (11.4%)	50,928 (2.5%)	424,962 (20.6%)	1,254,845 (60.7%)	39.3%	22.3%
Dutchess County	293,754	3.5%	9.8%	3.0%	12.2%	71.5%	28.5%	21.4%
Orange County	380,085	2.7%	10.0%	2.6%	20.5%	64.2%	35.8%	25.8%
Putnam County	98,787	2.0%	2.7%	1.5%	15.0%	78.7%	21.3%	12.7%
Rockland County	324,422	5.9%	11.3%	2.0%	17.7%	63.1%	36.9%	28.3%
Westchester County	968,890	5.9%	13.4%	2.5%	24.7%	53.5%	46.5%	20.2%
New Jersey Counties	7,060,811	749,331 (10.6%)	856,041 (12.1%)	155,823 (2.2%)	1,546,228 (21.9%)	3,753,388 (53.2%)	46.8%	22.5%
Bergen County	930,390	16.2%	5.3%	2.0%	19.9%	56.6%	43.4%	16.1%
Essex County	795,404	5.3%	38.4%	2.7%	23.0%	30.5%	69.5%	33.3%
Hudson County	670,046	15.0%	10.5%	2.6%	43.1%	28.8%	71.2%	32.8%
Hunterdon County	124,823	4.1%	2.4%	1.4%	6.5%	85.5%	14.5%	10.7%
Mercer County	367,922	11.1%	19.8%	1.8%	17.5%	49.7%	50.3%	25.0%
Middlesex County	825,920	23.9%	9.5%	2.3%	21.2%	43.1%	56.9%	19.4%
Monmouth County	621,659	5.4%	6.7%	1.9%	10.8%	75.2%	24.8%	16.3%
Morris County	493,379	10.3%	3.2%	1.9%	13.3%	71.4%	28.6%	12.4%

Table 17-2. Population Characteristics of the Regional Study Area

GEOGRAPHIC AREA	TOTAL POPULATION	ASIAN (NON-HISPANIC)	BLACK (NON-HISPANIC)	OTHER (NON-HISPANIC)	HISPANIC OR LATINO	WHITE (NON-HISPANIC)	% MINORITY	% LOW-INCOME
Ocean County	596,415	1.8%	2.8%	1.5%	9.2%	84.7%	15.3%	24.8%
Passaic County	503,637	5.1%	10.4%	1.6%	41.5%	41.3%	58.7%	32.8%
Somerset County	329,838	17.6%	9.2%	2.2%	14.7%	56.3%	43.7%	12.1%
Sussex County	141,483	2.0%	2.1%	1.3%	8.2%	86.3%	13.7%	13.6%
Union County	554,033	5.0%	20.1%	3.8%	31.6%	39.5%	60.5%	24.8%
Warren County	105,862	2.7%	4.4%	2.0%	9.3%	81.7%	18.3%	19.1%
Connecticut Counties	1,801,439	84,153 (4.7%)	207,373 (11.5%)	46,465 (2.6%)	341,331 (18.9%)	1,122,117 (62.3%)	37.7%	23.1%
Fairfield County	943,926	5.3%	10.6%	2.6%	19.7%	61.7%	38.3%	20.8%
New Haven County	857,513	4.0%	12.5%	2.5%	18.1%	62.9%	37.1%	25.6%
TOTAL	22,187,845	2,296,980 (10.4%)	3,396,219 (15.3%)	569,496 (2.6%)	5,276,241 (23.8%)	10,648,909 (48.0%)	52.0%	26.8%

Source: U.S. Census Bureau, ACS 2015–2019 5-Year Estimates.

Notes:

1. Percentages may not add to 100 percent due to rounding.
2. Other includes the census categories of American Indian and Alaska Native, Native Hawaiian or other Pacific Islander, Some Other Race, and Two or More Races. People of any race may also be Hispanic.
3. Total minority percentage consists of all population other than non-Hispanic White people.
4. Low-income population is population with annual household incomes of up to twice (1.99 times) the Federal poverty threshold.

17.5.3.2 Regional Travel Characteristics

According to 2012–2016 CTPP data, nearly 10.7 million people had their place of employment in the regional study area, and about 14 percent of them (approximately 1.5 million) work in the Manhattan CBD, based on the 2012–2016 CTPP. Of those, approximately 1,262,400 commute from locations outside the Manhattan CBD and the remainder live and work in the Manhattan CBD. **Table 17-3** shows the counties of residence for people who commute to the Manhattan CBD for work, including people who live within the Manhattan CBD itself.

Table 17-3. Comparison of Origins for Commuters to the Manhattan CBD

ORIGIN (PLACE OF RESIDENCE)	COMMUTERS TO MANHATTAN CBD	PERCENTAGE OF STUDY AREA TOTAL
New York City	1,074,244	70.9%
Bronx County	99,929	6.6%
Kings County (Brooklyn)	277,884	18.4%
New York County (Manhattan)	454,981	30.0%
Queens County	210,661	13.9%
Richmond County (Staten Island)	30,789	2.0%
Long Island Counties	96,458	6.4%
New York Counties North of New York City	89,410	5.9%
New Jersey Counties	226,300	14.9%
Connecticut Counties	27,697	1.8%
TOTAL	1,514,109	100.0%

Source: U.S. Census Bureau, CTPP, 2012–2016 Estimate. Percentages may not sum to 100 percent due to rounding.

Notes:

1. Numbers from different tables in the CTPP (e.g., total commuters to the Manhattan CBD) may not be identical due to rounding and different methods of estimating inherent in the CTPP.
2. Long Island counties include Nassau and Suffolk.
New York counties north of New York City include Dutchess, Orange, Putnam, Rockland, and Westchester.
New Jersey counties include Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union, and Warren.
Connecticut counties include Fairfield and New Haven.

Approximately 28 percent of households in the regional study area do not have a vehicle available for their use (and, conversely, 72 percent of households have one or more vehicles available), although vehicle access varies widely across the region, as shown in **Table 17-4**. The proportion of households that do not have access to a vehicle is substantially higher in Manhattan (77 percent in Manhattan as a whole, 80 percent in the Manhattan CBD), the Bronx (59 percent), and Brooklyn (56 percent), than in the region (28 percent).

Table 17-4. Vehicle Access in the Regional Study Area

GEOGRAPHIC AREAS	TOTAL HOUSEHOLDS	HOUSEHOLDS WITH NO ACCESS TO A VEHICLE	PERCENTAGE OF HOUSEHOLDS WITH NO ACCESS TO A VEHICLE
New York City	3,167,034	1,730,704	54.6%
Bronx County	503,829	297,663	59.1%
Kings County (Brooklyn)	958,567	534,368	55.8%
New York County (Manhattan)	759,460	584,710	77.0%
Queens County	778,932	286,141	36.7%
Richmond County (Staten Island)	166,246	27,822	16.7%
Long Island Counties	936,278	56,401	6.0%
New York Counties North of New York City	721,013	84,061	11.7%
New Jersey Counties	2,558,509	314,320	12.3%
Connecticut Counties	670,761	64,645	9.6%
TOTAL	8,053,595	2,250,131	27.9%

Source: U.S. Census Bureau, ACS 2015–2019 5-Year Estimates.

Note:

Long Island counties include Nassau and Suffolk.

New York counties north of New York City include Dutchess, Orange, Putnam, Rockland, and Westchester.

New Jersey counties include Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union, and Warren.

Connecticut counties include Fairfield and New Haven.

Residents of New York City in particular are most likely to use transit¹² to travel to work in the Manhattan CBD. With a dense network of public transportation options throughout New York City and 24-hour service throughout that network, CTPP data indicate that 88 percent of the New York City residents who travel to the Manhattan CBD for work from outside the Manhattan CBD use public transportation for their commute. All of New York City is within one-half mile of a commuter rail station, subway station, or bus stop except one small area in southern Queens, a gated community called Breezy Point (see **Figure 5A-3 in Subchapter 5A**). Most of New York City is also within one-half mile of the faster public transportation modes available—commuter rail, subway, or Select Bus Service (SBS), New York City’s growing bus rapid transit system.¹³

Approximately 440,000 people (or about 5.2 percent of the city’s 8.4 million residents) live in areas of New York City that are more than one-half mile from these faster public transportation modes (commuter rail, subway, or express bus or SBS service), and approximately 33,900 of them commute to the Manhattan CBD. Approximately 5,200 (15 percent) of these commuters to the Manhattan CBD travel by car.

¹² Unless otherwise noted, the terms “public transportation” and “transit” are used interchangeably throughout this chapter.

¹³ One-half mile represents an approximately 10- to 15-minute walk for an average pedestrian, and therefore indicates the availability of these transportation services.

17.5.3.3 Minority Commuters to Manhattan CBD from the Regional Study Area

More than half of the population of the regional study area (52 percent) identifies as minority, as shown in **Table 17-2** earlier in this chapter. The percentage of population who identify as minority populations is highest in New York City (68 percent), where all but Richmond County (Staten Island) are more than 50 percent minority and the Bronx (91 percent) and Queens (75 percent) have the highest proportions. In New Jersey, the counties closest to New York City also have populations with more than half identifying as minority (in particular, Essex County, with 70 percent; Hudson County, with 71 percent, Middlesex, with 57 percent; Passaic, with 59 percent; and Union, with 61 percent).

Consequently, many of the people who commute to work in the Manhattan CBD identify as minority. **Table 17-5** provides information on the number of minority commuters to the Manhattan CBD from the different origins in the regional study area. A total of 715,195 of the region's commuters to the Manhattan CBD (47.2 percent) identify as minority populations. Of these commuters, over three-quarters (76.9 percent) are from New York City, 14.5 percent are from New Jersey, 0.8 percent are from Connecticut, and 7.8 percent are from the other New York counties in the study area.

Table 17-5. Origins for All Commuters and Minority Commuters to the Manhattan CBD (All Modes)

ORIGIN (PLACE OF RESIDENCE)	ALL COMMUTERS	MINORITY COMMUTERS	% OF COMMUTERS WHO ARE MINORITY
New York City	1,074,244	549,993	51.2%
Bronx County	99,929	89,406	89.5%
Kings County (Brooklyn)	277,884	142,988	51.5%
New York County (Manhattan)	454,981	163,832	36.0%
Queens County	210,661	143,214	68.0%
Richmond County (Staten Island)	30,789	10,553	34.3%
Long Island Counties	96,458	28,897	30.0%
New York Counties North of New York City	89,410	26,962	30.2%
New Jersey Counties	226,300	103,685	45.8%
Connecticut Counties	27,697	5,658	20.4%
TOTAL	1,514,109	715,195	47.2%

Source: U.S. Census Bureau. CTPP, 2012–2016 Estimate. Percentages may not sum to 100 percent due to rounding.

Notes:

1. Numbers from different tables in the CTPP (e.g., total commuters to the Manhattan CBD) may not be identical due to rounding and different methods of estimating inherent in the CTPP.
2. Long Island counties include Nassau and Suffolk.
New York counties north of New York City include Dutchess, Orange, Putnam, Rockland, and Westchester.
New Jersey counties include Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union, and Warren.
Connecticut counties include Fairfield and New Haven.

Table 17-6 provides information on the mode of transportation to work for all workers and for minority workers in the Manhattan CBD. As shown in **Table 17-6**, approximately 10 percent of the minority commuters to the Manhattan CBD, or close to 73,000 people, use cars to make their trip. This is similar to the overall population of all commuters, of whom approximately 10.2 percent use cars.

Table 17-6. Travel Mode to Manhattan CBD for All Workers and Minority Workers

COMMUTERS TO MANHATTAN CBD	COMMUTE BY AUTO	COMMUTE BY TRANSIT	COMMUTE BY BICYCLE OR WALK	COMMUTE BY OTHER MODE
All workers	157,852 (10.2%)	1,213,793 (78.1%)	128,638 (8.3%)	53,530 (3.4%)
Minority workers	72,936 (10.0%)	602,493 (82.4%)	42,080 (5.8%)	13,425 (1.8%)

Source: U.S. Census Bureau. CTPP, 2012–2016 Estimate. Percentages may not sum to 100 percent due to rounding.

Notes:

1. Numbers from different tables in the CTPP (e.g., total commuters to the Manhattan CBD) may not be identical due to rounding and different methods of estimating inherent in the CTPP. Total workers shown in this table are those for whom means of transportation is available.
2. Commute by other mode includes taxicab, motorcycle, other modes, and people who work at home.

Table 17-7 and **Figure 17-5** provide more specific information on the origins of minority auto commuters to the Manhattan CBD, based on the CTPP. As shown, more than half of the minority auto commuters come from locations in New York City, including more than 20 percent from Queens. About one-quarter of the minority auto commuters come from locations in New Jersey.

Table 17-7. Estimated Origins of Minority Auto Commuters to the Manhattan CBD

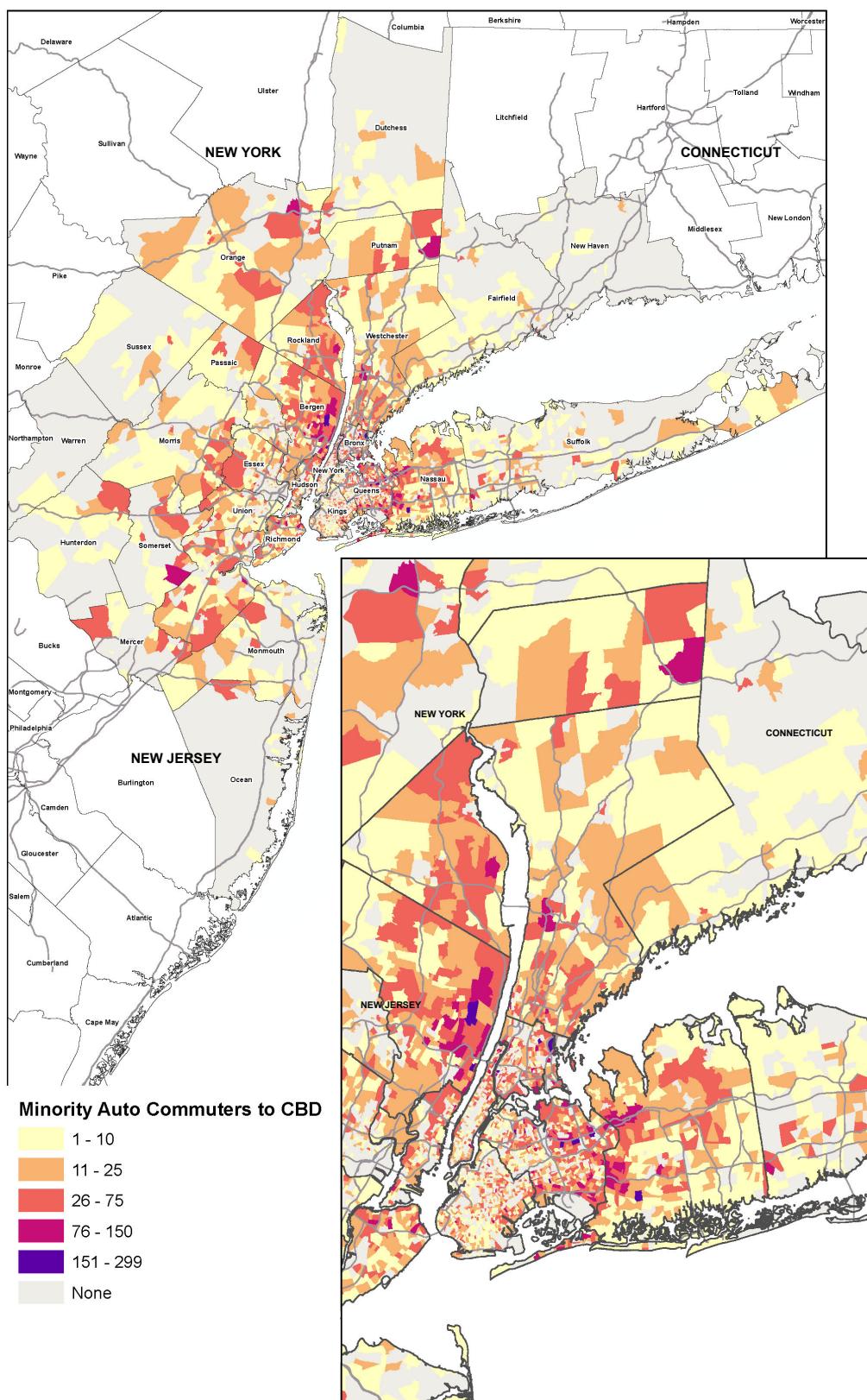
ORIGIN (PLACE OF RESIDENCE)	MINORITY AUTO COMMUTERS TO MANHATTAN CBD	PERCENTAGE OF STUDY AREA TOTAL
New York City	41,505	56.9%
Bronx County	8,125	11.1%
Kings County (Brooklyn)	9,528	13.1%
New York County (Manhattan)	5,143	7.1%
Queens County	16,410	22.5%
Richmond County (Staten Island)	2,299	3.2%
Long Island Counties	6,740	9.2%
New York Counties North of New York City	6,756	9.3%
New Jersey Counties	17,070	23.4%
Connecticut Counties	864	1.2%
TOTAL	72,936	100.0%

Source: U.S. Census Bureau, CTPP, 2012–2016 Estimate.

Estimates of origins for minority commuters based on analysis by AKRF, Inc. for this EA.

For more information on the methodology for this estimate, see **Appendix 17, “Environmental Justice.”**

Figure 17-5. Origins of Minority Auto Commuters to the Manhattan CBD



Source: U.S. Census Bureau, CTPP, 2012–2016 Estimate.

17.5.3.4 Low-Income Commuters to Manhattan CBD from the Regional Study Area

About 14 percent of the commuters to the Manhattan CBD (about 219,000 people) are low-income. Most of these low-income commuters (88 percent, or just under 193,000 people) live in New York City, and about 14 percent (close to 32,000 people) live and work within the Manhattan CBD. About 8 percent of the low-income commuters to the Manhattan CBD are from New Jersey, about 2 percent are from Long Island and the New York counties north of New York City, and fewer than 1 percent are from Connecticut (See **Table 17-8.**)

Table 17-8. Origins for All Commuters and Low-Income Commuters to the Manhattan CBD (All Modes)

ORIGIN (PLACE OF RESIDENCE)	ALL COMMUTERS	LOW-INCOME COMMUTERS	% OF COMMUTERS WHO ARE LOW-INCOME
New York City	1,074,244	192,497	17.9%
Bronx County	99,929	36,718	36.7%
Kings County (Brooklyn)	277,884	49,910	18.0%
New York County (Manhattan)	454,981	64,439	14.2%
Queens County	210,661	38,959	18.5%
Richmond County (Staten Island)	30,789	2,471	8.0%
Long Island Counties	96,458	3,773	3.9%
New York Counties North of New York City	89,410	4,443	5.0%
New Jersey Counties	226,300	16,830	7.4%
Connecticut Counties	27,697	980	3.5%
TOTAL	1,514,109	218,523	14.4%

Source: U.S. Census Bureau, CTPP, 2012–2016 Estimate. Percentages may not sum to 100 percent due to rounding.

Notes:

1. Numbers from different tables in the CTPP (e.g., total commuters to the Manhattan CBD) may not be identical due to rounding and different methods of estimating inherent in the CTPP.
2. Low-income commuters are those with household incomes of less than \$50,000.
3. Long Island counties include Nassau and Suffolk.
New York counties north of New York City include Dutchess, Orange, Putnam, Rockland, and Westchester.
New Jersey counties include Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union, and Warren.
Connecticut counties include Fairfield and New Haven.

A total of 16,100 low-income workers drive to the Manhattan CBD for work, based on the CTPP. The CTPP provides information on income level and mode by commuters' origin, but only at the county level. However, information on commuting patterns to Manhattan overall help to understand where low-income drivers to the Manhattan CBD live. As shown in **Table 17-9**, about 72 percent of the low-income commuters who drive to Manhattan for work come from locations within New York City, and the largest share comes from Queens, followed by Brooklyn and the Bronx. About 14 percent of the low-income drivers come from New Jersey.

Table 17-9. Travel Modes for Low-Income Commuters to Manhattan Overall by Origin

ORIGIN (PLACE OF RESIDENCE)	ALL LOW-INCOME COMMUTERS	LOW-INCOME COMMUTERS BY TRANSIT	LOW-INCOME COMMUTERS BY AUTO	% OF ALL LOW-INCOME COMMUTERS BY AUTO
New York City	401,220	319,400	28,485	72%
Bronx County	81,005	73,210	6,200	16%
Kings County (Brooklyn)	93,785	85,685	6,280	16%
New York County (Manhattan)	137,510	83,965	5,300	13%
Queens County	83,335	72,215	9,580	24%
Richmond County (Staten Island)	5,585	4,325	1,125	3%
Long Island Counties	7,375	4,690	2,520	6%
New York Counties North of New York City	8,247	5,245	2,880	7%
New Jersey Counties	27,328	21,465	5,406	14%
Connecticut Counties	1,705	1,215	480	1%
TOTAL	445,875	352,015	39,771	100%

Source: U.S. Census Bureau, CTPP, 2012–2016 Estimate.

Notes:

1. Auto commuters include those who drive alone and those who carpool.
2. Low-income commuters are those with household incomes of less than \$50,000.
3. Long Island counties include Nassau and Suffolk.

New York counties north of New York City include Dutchess, Orange, Putnam, Rockland, and Westchester.

New Jersey counties include Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union, and Warren.

Connecticut counties include Fairfield and New Haven.

17.5.3.5 Businesses Dependent on Vehicles: Taxi and For-Hire Vehicles

The analysis presented in **Chapter 6, “Economic Conditions,”** examines the effects of the Project on various vehicle-dependent industries and concludes that the implementation of a new toll with the CBD Tolling Alternative would not result in adverse effects on businesses in the Manhattan CBD because of the introduction of a new toll.

Tolling scenarios included in the CBD Tolling Alternative include a range of treatments of taxis and FHV trips. Some scenarios exempt taxi and FHV trips from the charge entirely, some include discounts in the form of caps on the number of trips that would be subject to the charge, some charge taxi and FHV trips once per day, and others charge them for every trip entering or remaining in the Manhattan CBD. Scenarios that charge every taxi and FHV trip would lead to higher overall prices paid by customers for these trips. While the CBD Tolling Alternative would not result in an adverse economic impact on the taxi and FHV industry overall, it could reduce employment of taxi and FHV drivers in some tolling scenarios. **Section 17.6.2.2** later in this chapter describes the potential adverse effect on these drivers in more detail. This section presents information about the population characteristics of those drivers, based on available information from the New York City Taxi and Limousine Commission (TLC), which grants licenses for taxi cabs and FHVs in the city.

Taxis include yellow cabs (which are authorized to operate throughout New York City) and green cabs (which are authorized to pick up passengers by street-hail outside of the core service area of Manhattan).

Street-hail livery cabs can accept trips in Manhattan north of East 96th Street and West 110th Street, and in any location in the boroughs outside of Manhattan. FHV's include "traditional" FHV's, which are pre-arranged trips via black cars, liveries, and luxury limousine dispatched from a base that handles fewer than 10,000 trips each day, and "high-volume" for-hire services, which are pre-arranged trips dispatched from a base that handles more than 10,000 trips each day. The high-volume FHV category includes Lyft and Uber.

The TLC provides data for both licensed vehicles and drivers (those who are currently in good standing with TLC's licensing division) and active vehicles and drivers (those who provided at least one trip in a given time period). According to the TLC's 2020 Fact Book, in 2019 there were 13,587 yellow cabs, 2,895 green cabs, and 101,663 FHV's licensed by the TLC.¹⁴ In 2019 the TLC licensed more than 118,000 vehicles and nearly 185,000 drivers in total. The number of active vehicles differs from the number of licensed vehicles, because not every licensed vehicle is actively in use during a given time period. In April 2022, there were 7,053 yellow cabs, 1,027 green cabs, and 70,281 FHV's that made at least one trip.

Data from the TLC indicates that approximately 96 percent of yellow and green cab drivers and 91 percent of FHV drivers were born in countries other than the United States. Based on this data, more than half the taxi or FHV drivers are from countries in Asia, Africa, and the Caribbean that have high percentages of populations that would be considered minority populations for this analysis.¹⁵ **Table 17-10** lists the countries of birth for taxi and FHV drivers according to the 2020 TLC Fact Book. Because no more specific data on the racial and ethnic characteristics of these drivers is available, for this analysis, all taxi and FHV drivers are identified as a minority population.

¹⁴ The New York City TLC's 2020 Fact Book defines paratransit vehicles as vehicles that provide pre-arranged service for medical-related purposes. Trips are usually to or from healthcare facilities and vehicles must be dispatched by a paratransit base. These do not include ADA-accessible yellow cabs.

¹⁵ New York City TLC. 2020 Fact Book. <https://www1.nyc.gov/assets/tlc/downloads/pdf/2020-tlc-factbook.pdf>.

Table 17-10. Country of Birth for Taxi and FHV Drivers, 2018–2019

COUNTRY OF ORIGIN	YELLOW CAB	GREEN CAB	TRADITIONAL FHV	HIGH VOLUME FHV
Bangladesh	23%	23%	4%	9%
China	—	—	5%	3%
Côte d'Ivoire	—	2%	—	—
Dominican Republic	2%	12%	31%	14%
Ecuador	—	3%	6%	—
Egypt	4%	3%	2%	3%
Ghana	4%	—	—	—
Guinea	—	3%	—	—
Haiti	6%	3%	3%	3%
India	8%	8%	4%	5%
Morocco	3%	—	—	—
Nepal	—	—	—	3%
Pakistan	9%	12%	6%	9%
Senegal	2%	—	—	—
United States	4%	3%	8%	9%
Uzbekistan	—	—	3%	3%
TOTAL REPORTED	65%	72%	69%	58%
OTHER ORIGINS NOT REPORTED	35%	28%	31%	42%

Source: New York City TLC. 2020 Fact Book. <https://www1.nyc.gov/assets/tlc/downloads/pdf/2020-tlc-factbook.pdf>.

Note: Data are as presented in the 2020 Fact Book. Information on country of birth for other drivers of each type is not available.

17.6 POTENTIAL ADVERSE EFFECTS ON ENVIRONMENTAL JUSTICE POPULATIONS

This section provides an analysis of the issues identified as warranting further investigation, based on the information in previous chapters of this EA and the concerns related to environmental justice raised during public outreach (see **Table 17-14** for a summary of the effects for each tolling scenario). This analysis considers whether potential adverse effects would occur to minority and/or low-income populations, given the context specific to those populations, even when no adverse effects would occur to the general population.

Consideration of whether effects would be adverse includes consideration of any measures to avoid, minimize, or mitigate potentially adverse effects.

17.6.1 Potential Adverse Effects in the Local Study Area

As noted earlier in this chapter, most of the effects of the CBD Tolling Alternative on environmental justice populations would be local effects. This section of the chapter evaluates each of those local effects to identify whether potential adverse effects on environmental justice populations would occur. The discussion includes the following topics, based on the issues identified in other chapters of this EA and as a result of environmental justice outreach for the Project:

- Increased traffic congestion on highway segments (**Section 17.6.1.1**)

- Changes in traffic conditions at local intersections (**Section 17.6.1.2**)
- Traffic-related effects on air quality (**Section 17.6.1.3**)
- Traffic-related effects on noise (**Section 17.6.1.4**)
- Increases to transit ridership (**Section 17.6.1.5**)
- Changes in passenger flows at transit stations (**Section 17.6.1.6**)
- Changes in pedestrian circulation on sidewalks near transit hubs (**Section 17.6.1.7**)
- Potential for indirect displacement (**Section 17.6.1.8**)

17.6.1.1 Increased Traffic Congestion on Highway Segments

During the targeted environmental justice public outreach for the Project in fall 2021, some commenters voiced concerns about the potential for increases in traffic on regional highways and how that might affect nearby environmental justice neighborhoods. This section describes the Project’s potential effects on traffic operations on highways in and around the Manhattan CBD. **Section 17.6.1.3** presents the potential air quality effects of these traffic changes and **Section 17.6.1.4** describes the conclusions of the noise analysis.

In response to comments during the fall 2021 outreach, the traffic analyses for the EA were expanded to include additional locations in environmental justice neighborhoods where concerns were raised and more detailed evaluation of changes in truck volumes on highways and local roadways. In addition, the Project Sponsors added a tolling scenario for analysis throughout the EA, Tolling Scenario G, to evaluate opportunities for reducing truck diversions that would result from the CBD Tolling Alternative.

As described in **Subchapter 4B, “Transportation: Highways and Local Intersections,”** detailed modeling was conducted for 10 highway segments near the Manhattan CBD that provide access to the Manhattan CBD or are circumferential routes around the Manhattan CBD that drivers could use to avoid the toll. These are the locations most likely to experience an increase in traffic due to a shift in traffic from currently toll-free facilities to currently tolled facilities and diversion of through Manhattan CBD traffic to circumferential routes. Several of these highway corridors were raised as a concern during early public outreach for the Project, given their proximity to neighborhoods with environmental justice populations.

The analysis presented in **Subchapter 4B, “Transportation: Highways and Local Intersections,”** concludes that with implementation of the CBD Tolling Alternative, traffic patterns would shift throughout the study area because of drivers who divert to avoid the new toll. The level of diversions would depend on the toll value and potential crossing credits or exemptions.

Tolling Scenario D—with the highest crossing credits, exemptions, and discounts—was determined to be representative of the tolling scenarios with the highest potential for diversions and increases in traffic at certain Manhattan CBD crossings, Manhattan CBD highway approaches, intersections within and outside of the Manhattan CBD, and circumferential routes bypassing the Manhattan CBD. Based on the results of the modeling, Tolling Scenario D would result in increased traffic congestion on 8 of those 10 highway segments, resulting in increased delays and queues in peak hours. The effects of Tolling Scenarios E and F would be similar. The projected increases in delays are discussed further in **Subchapter 4B, “Transportation: Highways and Local Intersections.”** On 3 of the 10 segments analyzed in detail, the increases in delay and

queue length due to the Project would constitute adverse effects on traffic conditions according to New York State's State Environmental Quality Review Act (SEQRA) impact criteria, as follows:

- Approaches to westbound George Washington Bridge on the Trans-Manhattan Expressway (I-95) between the Harlem River and the bridge during the midday peak hour
- The westbound Long Island Expressway (I-495) near the Queens-Midtown Tunnel during the midday peak hours
- The southbound and northbound Franklin D. Roosevelt (FDR) Drive between East 10th Street and the Brooklyn Bridge during the PM peak hour

With implementation of the CBD Tolling Alternative, a robust post-implementation traffic monitoring program will be implemented to identify and quantify actual traffic effects associated with the adopted tolling scenario and to inform the development of appropriate mitigation measures, if needed, including Intelligent Transportation Systems (ITS) measures, signing, motorist information, and targeted toll policy modifications. Depending on the tolling program implemented, it is possible that some residual traffic effects along certain highway segments may remain. However, given the relatively few locations where there is a potential for adverse traffic effects along highways leading to and from the Manhattan CBD and circumferential highways, the offsetting reductions in traffic volumes and improvements in travel times along routes from which traffic would divert, and the overall Project benefits in the Manhattan CBD and regionally due to a reduction in vehicular travel, the Project when viewed holistically would not have an adverse effect on traffic. **Subchapter 4B, “Transportation: Highways and Local Intersections,”** provides more specific information on the adverse effects and proposed mitigation.

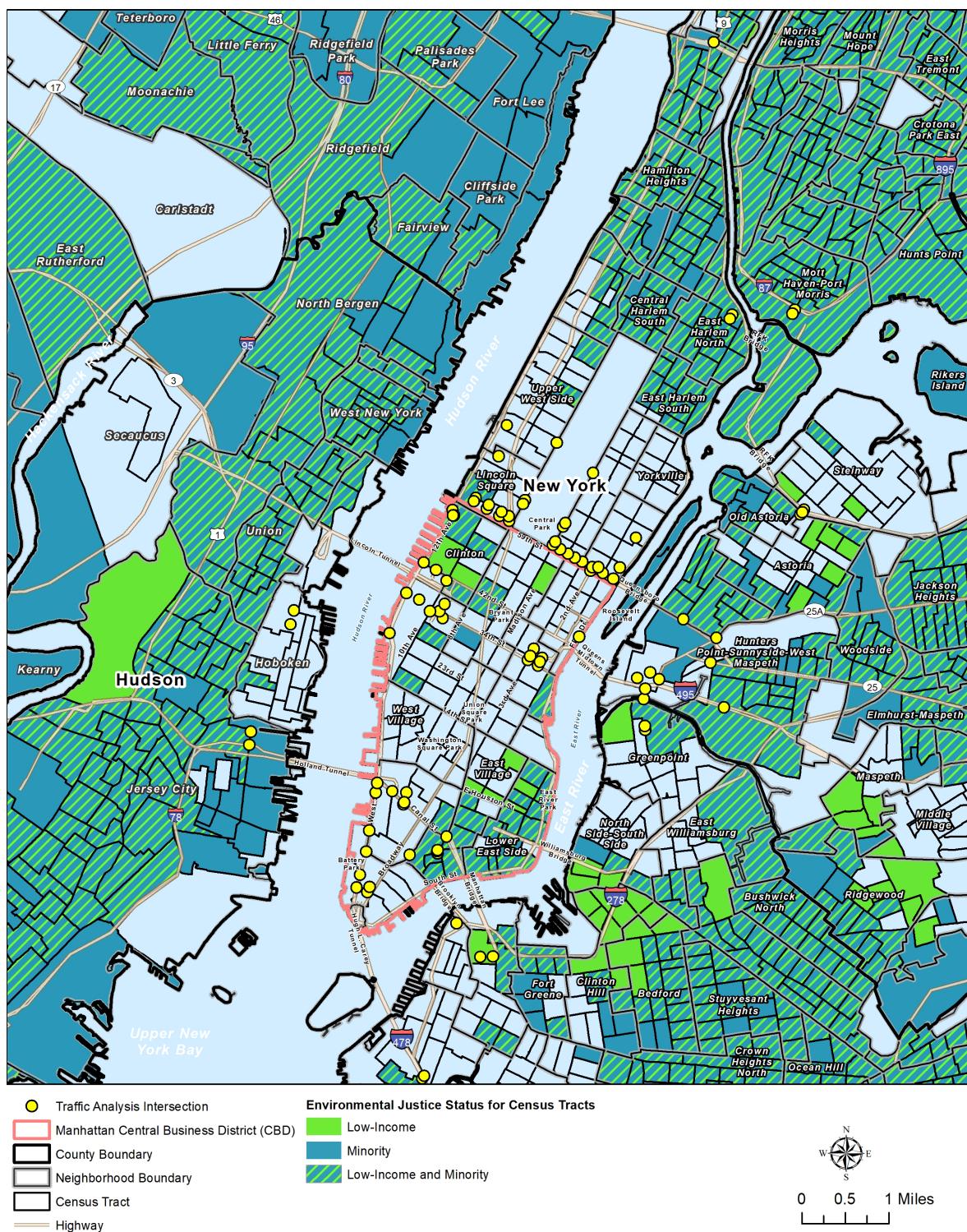
All 10 highway segments analyzed in detail for this EA are within or adjacent to environmental justice census tracts. As shown in **Figure 17-3**, much of the area around the Manhattan CBD consists of neighborhoods with environmental justice census tracts. However, as major regional highways, these highway segments predominantly serve regional and interstate traffic rather than local traffic.

17.6.1.2 Changes in Traffic Conditions at Local Intersections

Subchapter 4B, “Transportation: Highways and Local Intersections,” presents the results of a detailed analysis of traffic conditions in and near the Manhattan CBD. To evaluate the potential localized traffic effects of the Project, multiple study areas were defined based on the key entry points to the Manhattan CBD, including along the 60th Street Manhattan CBD boundary and on either side of the bridges and tunnels that provide access to and from the Manhattan CBD. These local study areas are the intersections most likely to have increases in traffic, based on the regional transportation modeling for the Project. A total of 102 intersections were evaluated (see **Figure 17-6**).

Many of these intersections were identified through the public outreach process to reflect locations where communities expressed concerns regarding the Project’s potential to affect traffic conditions there. Of these 102 intersections, almost half are in environmental justice neighborhoods, reflecting the concerns that were expressed during public outreach.

Figure 17-6. Local Traffic Analysis Intersections Relative to Environmental Justice Neighborhoods



Source: U.S. Census Bureau, ACS 2015–2019 5-Year Estimates.

The traffic analysis concluded that shifts in traffic patterns would change conditions at some local intersections within and near the Manhattan CBD. Of the 102 intersections analyzed (with more than 363 analyses in multiple peak hours), most intersections would have reductions in delay under all tolling scenarios. The detailed evaluation conducted for the tolling scenarios with the greatest change in traffic volumes showed that those tolling scenarios (Tolling Scenarios D, E, and F) would result in increases in average delays at four intersections that would exceed the impact threshold established for SEQRA evaluations. These delays will be mitigated through the use of signal-timing adjustments and, therefore, there would not be an adverse traffic effect at any intersection. **Subchapter 4B, “Transportation: Highways and Local Intersections,”** provides more information on the proposed mitigation at each potentially affected location.

Consequently, the changes in traffic conditions at local intersections would not result in adverse effects on environmental justice populations.

17.6.1.3 Traffic-Related Effects on Air Quality

During early public outreach for the Project, participants in the environmental justice outreach sessions raised concerns that the CBD Tolling Alternative would divert traffic to circumferential highways around the Manhattan CBD and that these additional vehicles would adversely affect the nearby neighborhoods by degrading air quality. Other participants were concerned that changes in traffic at local intersections, including on the Lower East Side in the Manhattan CBD and in the South Bronx outside the Manhattan CBD, would adversely affect air quality nearby.

Air pollution is a concern because of its associated adverse effects on human health. This is a particular concern for environmental justice populations, who often live in areas already considered overburdened by pollution. Exhaust from trucks, which has a higher level of particulate matter (PM) than automobile exhaust, and has been associated with adverse health effects like cardiovascular and respiratory diseases, is a particular concern for many environmental justice populations (for more information on health effects of air pollutants, see **Appendix 10, “Air Quality”**). Members of the Environmental Justice Technical Advisory Group for the Project requested additional information on the Project’s potential to increase the number of trucks on highways outside the Manhattan CBD, especially on the Cross Bronx Expressway in the South Bronx.

Chapter 10, “Air Quality,” of this EA presents the results of the evaluation conducted of the Project’s potential effects on air quality. The analysis included consideration of highway segments throughout the region and local intersections where traffic would be most likely to change as a result of the Project. In response to specific environmental justice concerns identified above, the Project Sponsors included locations on the Lower East Side, in the South Bronx, and at other locations in environmental justice neighborhoods in and near the Manhattan CBD.

The air quality analysis included evaluation of the following types of air pollutants (for more information, see **Chapter 10, “Air Quality”**):

- Pollutants regulated by the National Ambient Air Quality Standards (NAAQS): Referred to as “criteria” pollutants, these include carbon monoxide (CO); nitrogen dioxide (NO_2); ozone (O_3); PM regulated in two sizes, 2.5 microns and 10 microns ($\text{PM}_{2.5}$ and PM_{10}); sulfur dioxide (SO_2); and lead (Pb).
- Mobile source air toxics (MSAT): These are air pollutants associated with vehicular traffic that are hazardous to human health and are also regulated by the U.S. Environmental Protection Agency (EPA).

Effects of the Project on Regional Air Quality

The regional analysis focused on 12 counties in New York and New Jersey. Emissions estimates were based on predicted changes in VMT, speed, and vehicle mix since the interaction of these factors affects the relative decreases and increases in each county. Some counties are predicted to show increases in pollutant emissions, while others would have decreases, as shown in **Table 17-11** (for more information, see **Chapter 10, “Air Quality”**).

Effects of the Project on Local, Neighborhood Air Quality

The analysis of the Project’s potential effect on local air quality near roadways where traffic would increase considered all 102 intersections for which traffic analyses were conducted as presented in **Subchapter 4B, “Transportation: Highways and Local Intersections” (Figure 17-6)**. Those intersections are the locations most likely to experience increases in traffic, based on the regional transportation modeling for the Project. Of these 102 intersections, approximately half are in environmental justice neighborhoods, reflecting the concerns that were expressed during public outreach.

Based on the air quality analyses conducted, the level of potential change in CO and $\text{PM}_{2.5}/\text{PM}_{10}$ at all 102 intersections would not result in adverse effects on local air quality, based on evaluation criteria developed by NYSDOT. All locations passed the screening criteria used to identify the potential for adverse effects requiring further evaluation.

Effects of the Project on Highway Traffic Related to Diversions

To address specific concerns related to truck diversions raised during environmental justice public outreach, the air quality analysis also included specific consideration of the potential truck diversions that could occur as a result of the CBD Tolling Alternative. In addition, the Project Sponsors also evaluated a segment of the FDR Drive near the Lower East Side in Manhattan because of the potential for notable traffic diversions there. Truck traffic is not permitted on the FDR Drive, so this analysis considered the effects of automobile traffic only.

Table 17-11. Summary of Effects of CBD Tolling Alternative on Air Pollutants at the County Level

GEOGRAPHY	CRITERIA POLLUTANTS (2023)	CRITERIA POLLUTANTS (2045)	MSATs (2023)	MSATs (2045)
Manhattan CBD	Decreases of all pollutants	Decreases of all pollutants	Decreases in all MSATs	Decreases in all MSATs
New York County (Manhattan)	Decreases of all pollutants	Decreases of all pollutants	Decreases in all MSATs	Decreases in all MSATs
Bronx County	Increases of all pollutants	Decreases of some pollutants; increases of other pollutants	Increases in all MSATs	Decreases of some MSATs; increases of others
Kings County (Brooklyn)	Decreases of all pollutants	Decreases of all pollutants	Decreases in all MSATs	Decreases in all MSATs
Queens County	Decreases of all pollutants	Decreases of all pollutants	Decreases in all MSATs	Decreases in all MSATs
Richmond County (Staten Island)	Increases of all pollutants	Increases of all pollutants	Increases in all MSATs	Increases in all MSATs
Bergen County	Increases of all pollutants	Increases of all pollutants	Increases in all MSATs	Increases in all MSATs
Hudson County	Decreases of all pollutants	Decreases of all pollutants	Decreases in all MSATs	Decreases in all MSATs
Nassau County	Increases of all pollutants	Decreases of some pollutants; increases of other pollutants	Increases in all MSATs	Decreases of some MSATs; increases of others
Putnam County	Decreases of some pollutants; increases of other pollutants	Decreases of some pollutants; increases of other pollutants	Increases in all MSATs	Decreases in all MSATs
Rockland County	Decreases of all pollutants	Decreases of some pollutants; increases of other pollutants	Decreases in all MSATs	Decreases of some MSATs; increases of others
Suffolk County	Decreases of some pollutants; increases of other pollutants	Decreases of all pollutants	Increases in all MSATs	Decreases in all MSATs
Westchester County	Decreases of some pollutants; increases of other pollutants	Decreases of some pollutants; increases of other pollutants	Decreases in all MSATs	Decreases of some MSATs; increases of others

The Project Sponsors also developed and evaluated a modified tolling scenario, Tolling Scenario G, following completion of a preliminary analysis of Tolling Scenarios A through F, specifically in response to concerns about truck diversions. Scenario G was developed as a potential modification to the Base Plan (Tolling Scenario A) that would reduce the number of trucks that would divert around the Manhattan CBD. This modification, Tolling Scenario G, has lower toll rates for trucks than the other tolling scenarios (see Chapter 2, “Project Alternatives,” Section 2.4.2.4 for more information).

Traffic modeling for the Project indicates that the CBD Tolling Alternative would result in some traffic diversions around Manhattan, into the Bronx and northern New Jersey and Staten Island in all tolling scenarios. These circumferential diversions are due to implementation of the tolling in the Manhattan CBD, as drivers and trucks traveling to and from Long Island and Pennsylvania would divert around Manhattan

to avoid the tolling in the Manhattan CBD. These diversions would be most pronounced at the approach to the Robert F. Kennedy Bridge in Queens, across the South Bronx and the George Washington Bridge, and into northern New Jersey. Diversions to the south would occur across the Verrazzano-Narrows Bridge and through Staten Island. Diversions would be greatest in Tolling Scenarios D, E, and F, and smallest in Tolling Scenario G.

To address concerns related to the potential effects on local air quality from those traffic diversions, the Project Sponsors conducted additional, more detailed analyses for four highway segments near environmental justice neighborhoods. These segments were selected based on the potential increases in diesel-truck traffic that might occur due to the Project, community concern, and/or existing high volumes of Annual Average Daily Traffic. The following locations were evaluated:

- FDR Drive at 10th Street, Manhattan, New York
- I-95 west of the George Washington Bridge, Fort Lee, New Jersey
- Cross Bronx Expressway (I-95) at Macombs Road, Bronx, New York
- Robert F. Kennedy Bridge approach, Queens, New York

For the FDR Drive, where Project-related changes would be related to automobiles and no trucks are permitted, the Project Sponsors conducted additional evaluation of the potential Project-related effects on CO. For the three other highway segments, because of the concern about increases in truck traffic, the Project team conducted detailed microscale PM analyses at these locations. The analyses for all four highway segments concluded that the CBD Tolling Alternative would not result in adverse effects on air quality at any of those locations. **Chapter 10, “Air Quality,”** provides more information on these analyses.

Changes in Traffic Volumes and VMT in Environmental Justice Neighborhoods vs. Non-Environmental Justice Neighborhoods

The air quality analyses presented in **Chapter 10** conclude that no adverse effects to air quality would occur at local intersections or along highway segments due to the CBD Tolling Alternative in any of the tolling scenarios. This section compares the changes in traffic volumes, and particularly VMT, that would occur in environmental justice neighborhoods to those that would occur in non-environmental justice neighborhoods. **Subchapter 4A, “Transportation: Regional Transportation Effects and Modeling,”** provides more detailed information on where increases and decreases in traffic volumes would occur due to diversions, as well as a comparison of Project-related changes in VMT in environmental justice communities vs. non-environmental justice communities.

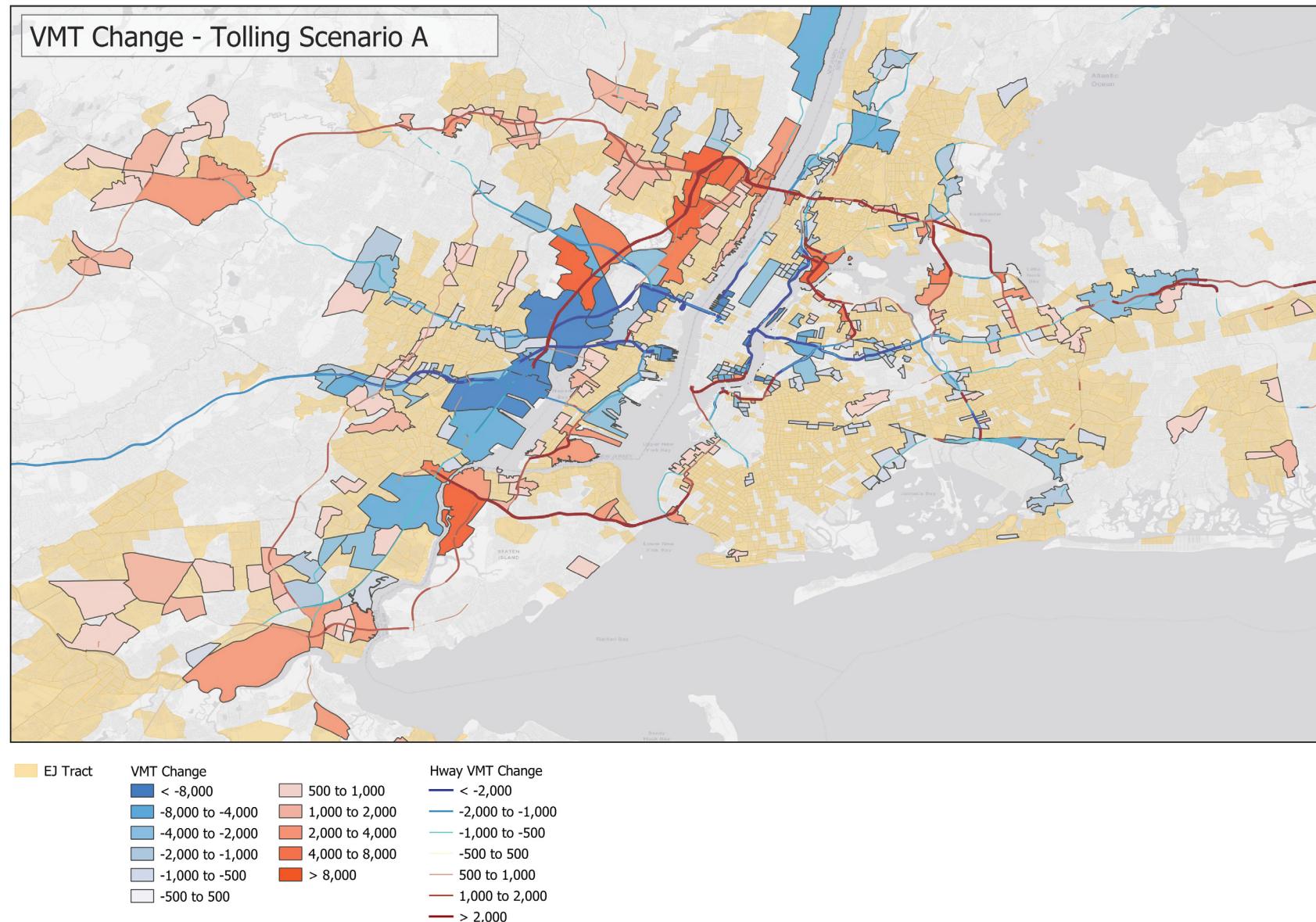
Tolling Scenarios A, B, C, and G, with the lowest level of discounts, exemptions, and/or crossing credits, would reduce the overall traffic volumes entering and leaving the Manhattan CBD with the least potential effect on travel patterns and diversions. However, VMT would increase slightly in Staten Island and the Bronx due to drivers to and from New Jersey diverting around the Manhattan CBD to avoid paying the CBD toll. Tolling Scenarios D, E, and F, with higher discounts, exemptions and/or crossing credits would create the highest overall reduction in traffic entering and leaving the Manhattan CBD, but with higher potential changes in travel patterns and diversions to several highways.

Overall, increases in traffic volumes due to diversions would occur near some environmental justice communities, and decreases would occur at other locations near environmental justice communities, depending on the tolling scenario. The environmental justice communities experiencing the largest increases in traffic volumes, including trucks, from circumferential diversions would be along I-95 in northern New Jersey and in Queens at the approach to the Robert F. Kennedy Bridge. Environmental justice communities experiencing the largest decreases in traffic volumes, including trucks, would be along the Long Island Expressway (I-495) in Queens, Hell's Kitchen in Manhattan (near the Lincoln Tunnel), and in areas of New Jersey south of the Lincoln Tunnel. Decreases would result primarily from traffic no longer traveling from Long Island through the Queens-Midtown Tunnel, across the Manhattan CBD, and through the Lincoln Tunnel into New Jersey. As shown in **Subchapter 4A**:

- Within New York City, non-environmental justice areas would have slightly higher reductions in VMT in most tolling scenarios compared to environmental justice areas.
- Within the Manhattan CBD, environmental justice areas would have substantially higher reductions in VMT for all tolling scenarios compared to non-environmental justice areas.
- Within New York City areas outside the Manhattan CBD closest to the Manhattan CBD crossings (i.e., near 60th Street; the Brooklyn, Manhattan, Williamsburg, and Ed Koch Queensboro Bridge, and the Queens-Midtown Tunnel), environmental justice areas would have slightly lower reductions in VMT compared to non-environmental justice areas for Tolling Scenarios A, B, and G (tolling scenarios without crossing credits) and slightly higher reductions in VMT compared to non-environmental justice areas for Tolling Scenarios C, D, E, and F (tolling scenarios with crossing credits).
- Within areas of New York City outside but relatively close to the Manhattan CBD (i.e., the Upper East Side, Upper West Side, East Harlem, and western portions of Queens and Brooklyn), environmental justice areas would experience similar but slightly lower reductions in VMT compared to non-environmental justice areas.
- Within other areas of New York City outside the Manhattan CBD, environmental justice areas would experience slight reductions in VMT, while non-environmental justice areas would experience increases in VMT.
- Outside New York City in other New York counties north of New York City, environmental justice areas would experience slightly higher reductions in VMT compared to non-environmental justice areas for Tolling Scenarios C, D, E, and F.
- In New Jersey and Long Island counties, environmental justice areas would experience similar or deeper reductions in VMT compared to non-environmental justice areas for all tolling scenarios.

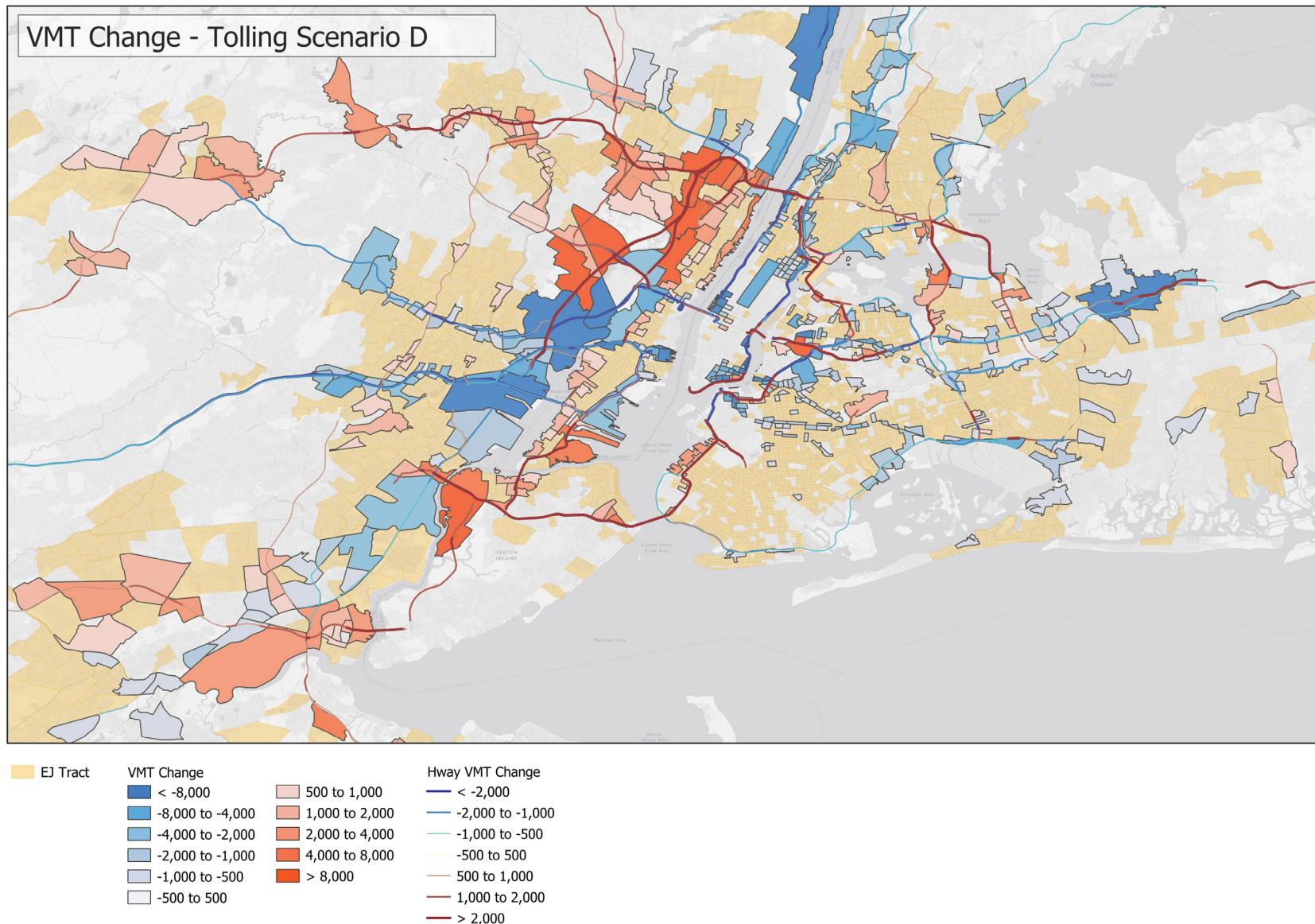
Figure 17-7, Figure 17-8, and Figure 17-9 illustrate the predicted changes in VMT for Tolling Scenarios A, D, and G relative to the location of environmental justice census tracts. Those three tolling scenarios represent the range of changes that would occur in all tolling scenarios evaluated.

Figure 17-7. Predicted Changes in Vehicle-Miles Traveled in Tolling Scenario A Relative to Environmental Justice Neighborhoods



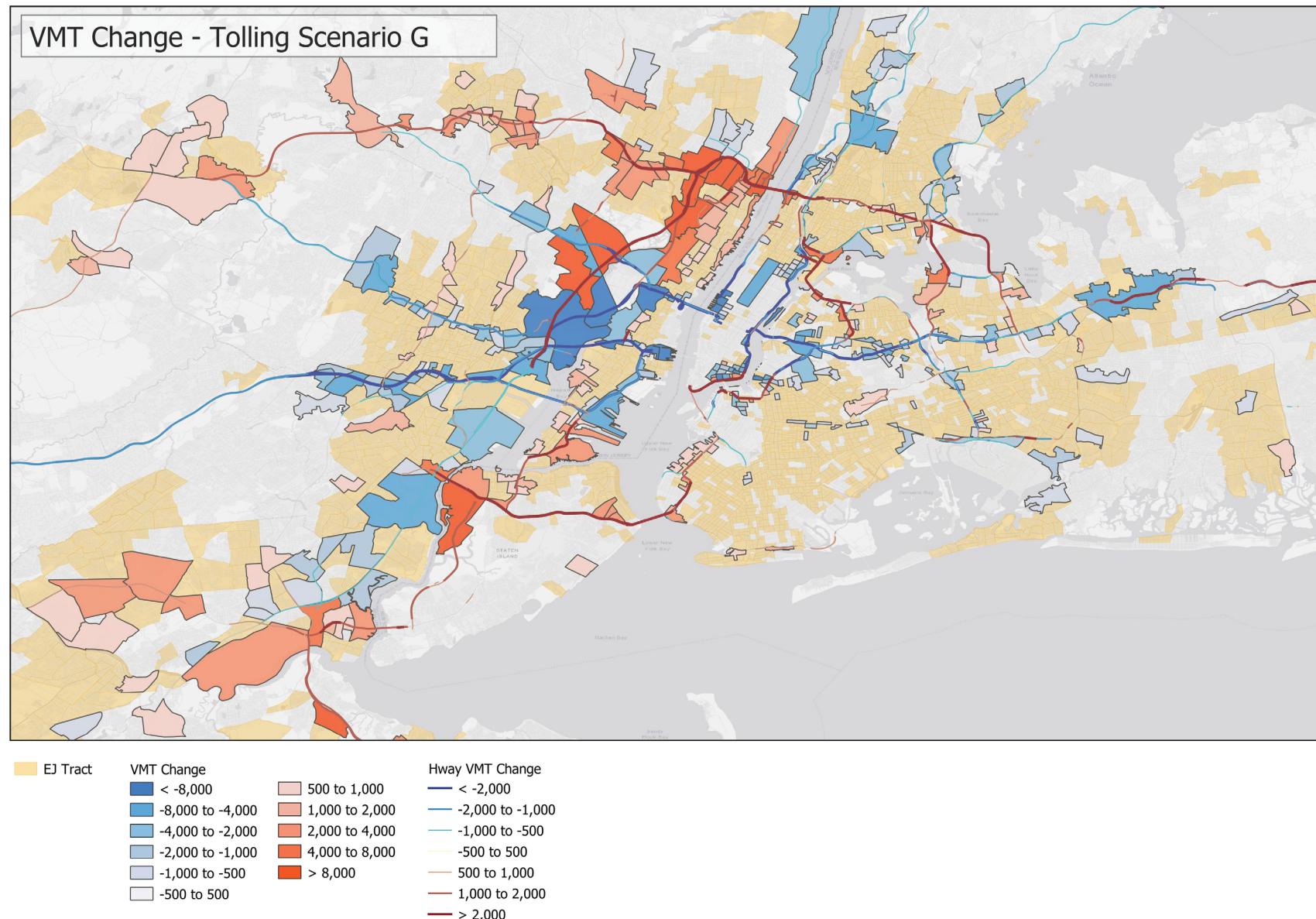
Source: WSP, Best Practice Model, 2021.

Figure 17-8. Predicted Changes in Vehicle-Miles Traveled in Tolling Scenario D Relative to Environmental Justice Neighborhoods



Source: WSP, Best Practice Model, 2021.

Figure 17-9. Predicted Changes in Vehicle-Miles Traveled in Tolling Scenario G Relative to Environmental Justice Neighborhoods



Source: WSP, Best Practice Model, 2021.

During the public outreach phase of the Project, several commenters raised questions about the type and location of diversions in the Bronx, and particularly on the Cross Bronx Expressway, the Bruckner Expressway, and the Major Deegan Expressway. Additional analysis was conducted to address these questions and is described in **Subchapter 4A, “Transportation: Regional Transportation Effects and Modeling.”** As described there, increases in VMT in the Bronx would be driven largely by increases in VMT on the Cross Bronx Expressway between the Alexander Hamilton Bridge and the two Long Island Sound crossings (Whitestone and Throgs Neck Bridges). Personal vehicle VMT would comprise most of the VMT increases on the Cross Bronx Expressway, with commercial truck VMT contributing roughly 25 percent of the overall VMT increase in all tolling scenarios. This increase in truck VMT would equate to up to 7 additional trucks during the 4-hour AM period, 40 additional trucks during the 6-hour midday period, and 10 additional trucks during the 4-hour PM period.

In addition, as noted earlier, following completion of preliminary analysis of Tolling Scenarios A through F, and in response to concerns raised during environmental justice outreach for the Project, the Project Sponsors identified a potential modification to the Base Plan (Tolling Scenario A) that would reduce the number of trucks that would divert around the Manhattan CBD, particularly those diverting to the South Bronx and Staten Island. This modification, Tolling Scenario G, would apply the same toll rates to all vehicle classes instead of charging higher rates small and large trucks and buses. As with Tolling Scenario A, there would be no crossing credits in Tolling Scenario G, and taxis, FHV, buses, and small or large trucks would pay the Manhattan CBD toll each time they access the Manhattan CBD. Tolling Scenario G would substantially reduce the diversion of trucks from the Manhattan CBD, resulting in a total daily increase in truck traffic on the Cross Bronx Expressway at Macombs Dam Road of 50 trucks (as compared to 704 for Tolling Scenario B and 536 for Tolling Scenario F, the two tolling scenarios with the highest truck diversions).

MTA Actions to Improve Air Quality

As an independent action, MTA is currently transitioning its fleet to zero-emission buses, which will reduce air pollutants and improve air quality near bus depots and along bus routes. TBTA coordinated with MTA NYCT, which is committed to prioritizing service to traditionally underserved communities and particularly for areas with concerns related to air quality and climate change, and has developed a new approach that actively incorporates these priorities in the deployment phasing process of the bus-fleet transition. Based on feedback and concerns raised during public outreach for the Project related to environmental justice, MTA NYCT will prioritize transitioning the fleet at two bus depots in Upper Manhattan and the Bronx: the Kingsbridge Depot and Gun Hill Depot when MTA NYCT receives its next major procurement of battery electric buses later in 2022. Both of these depots are in and provide service to environmental justice neighborhoods.

17.6.1.4 Traffic-Related Effects on Noise

Participants in the environmental justice outreach sessions in fall 2021 commented that changes in traffic conditions due to the CBD Tolling Alternative would adversely affect noise levels in nearby environmental justice neighborhoods. The EA includes an analysis of the potential for increased noise levels resulting from changes in traffic conditions with the CBD Tolling Alternative in **Chapter 12, “Noise.”**

The noise assessment was conducted for locations where traffic analysis was performed, where the results of the traffic studies indicated the potential for changes in noise levels to occur as a result of the Project. The assessment was completed for AM, midday, PM, and late-night peak periods at the same 102 local intersections for which detailed traffic analyses were conducted (**Figure 17-6**). Those intersections are the locations most likely to have increases in traffic, based on the regional transportation modeling for the Project. Of these 102 intersections, approximately half are in environmental justice neighborhoods, reflecting the concerns that were expressed during public outreach.

As described in **Chapter 12, “Noise,”** the analysis found that projected noise-level changes versus the No Action Alternative on all roadways evaluated would be below 3 dB(A),¹⁶ a level that is barely perceptible to most listeners. At locations near bridge and tunnel crossings, the maximum predicted noise level increase of 2.9 dB(A), which was predicted in Manhattan adjacent to the Queens-Midtown Tunnel in Tolling Scenario D, would not be perceptible. Similarly, the maximum predicted noise level on local streets where traffic would increase, an increase of 2.5 dB(A) at Trinity Place and Edgar Street in Lower Manhattan, would not be perceptible. Consequently, with the CBD Tolling Alternative, ambient noise levels would not be perceptibly different from those without the Project. Noise-level changes at approximately 90 percent of the evaluated roadways would range from -1 dB(A) to +1 dB(A), and less than 1 percent of the roadways evaluated would show an increase between 1 dB(A) and 2 dB(A).

As a result, the CBD Tolling Alternative would result in no adverse effects on ambient noise levels related to traffic changes with the CBD Tolling Alternative.

17.6.1.5 Increases to Transit Ridership

Some participants in the fall 2021 public outreach related to environmental justice raised concerns that the Project has the potential to overburden local bus service as people shift from automobile to transit to avoid the toll. The EA includes a detailed evaluation of the Project’s effects on transit ridership in **Subchapter 4C, “Transportation: Transit.”**

With all tolling scenarios for the CBD Tolling Alternative, some people who currently drive to and from the Manhattan CBD would shift to using transit instead. Overall, ridership on the extensive public transit system linking the Manhattan CBD with the surrounding region would increase by 1 to 2 percent relative to the No Action Alternative.

¹⁶ The noise analysis considers noise levels in dB(A), or A-weighted decibels, a unit of sound that accounts for those frequencies most audible to the human hearing range. Generally, the average human is unable to perceive noise-level changes until the changes measure more than 3 dB(A) and can readily perceive changes of 5 dB(A) or more (for more information on noise levels and human perception, see **Chapter 12, “Noise”**).

The region's transit users, including environmental justice populations, would experience increases in ridership on transit vehicles and at transit stations. Analysis presented in **Subchapter 4C, "Transportation: Transit,"** shows that there is sufficient capacity throughout the system, including commuter rail, Port Authority Trans-Hudson (PATH) rail, subway, and bus, to accommodate this increase in passengers.

In early public outreach, some participants expressed concerns regarding increases in bus ridership that could result from Project implementation. Commenters asked if additional buses would be needed to account for ridership increases. Based on the line-haul capacity analysis results presented in **Subchapter 4C,** which examined bus ridership at the point where the route would be the most crowded, no buses would cross the threshold for requiring detailed line-haul analysis; therefore, no adverse effects on bus lines are projected. This means that no new buses would be required to support ridership increases as a result of implementation of the CBD Tolling Alternative.

17.6.1.6 Changes in Passenger Flows at Transit Stations

The analysis in **Subchapter 4C, "Transportation: Transit,"** concludes that most transit stations throughout the regional public transportation system have adequate capacity to accommodate the projected increase in passengers that would occur as a result of the CBD Tolling Alternative, as people switch from automobile to transit to avoid the new CBD toll. However, analysis of the tolling scenarios with the greatest predicted increase in passengers at transit stations reveals that vertical circulation elements within four MTA NYCT subway stations in New York City and the PATH/NJ TRANSIT rail terminal in Hoboken, NJ, could become overcrowded by the additional riders during peak periods. These stations are in or adjacent to neighborhoods with environmental justice census tracts. In addition, since the majority of people who travel in the region use public transit, including minority populations, some of the passengers using the affected stairways and escalators are environmental justice populations.

Subchapter 4C, "Transportation: Transit," identifies measures to mitigate the effects on these vertical circulation elements, and these measures would eliminate the adverse effects at these locations. These affected stations, the specific location within the station where the adverse effect would occur, and the proposed mitigation measures are as follows:

- 42nd Street-Times Square subway station (Manhattan), Stair ML6/ML8 connecting mezzanine to uptown Nos. 1/2/3 subway lines platform: Remove the center handrail and standardize the riser, so that the stair meets code without the hand rail. Mitigation likely needed for Tolling Scenario E, and possibly for Tolling Scenarios D and F. Requires future monitoring, which will be conducted for the selected tolling scenario.
- Flushing-Main Street subway station (Queens), Escalator E456 connecting street to mezzanine level: Increase speed from 100 feet per minute to 120 feet per minute. Mitigation likely needed for Tolling Scenarios A, C, D, E, F; and possibly for Scenario B. Requires future monitoring, which will be conducted for the selected tolling scenario.
- Union Square subway station (Manhattan), Escalator E219 connecting the L subway line platform to the Nos. 4/5/6 subway line mezzanine: Increase speed from 100 feet per minute to 120 feet per minute.

Mitigation likely needed for Tolling Scenarios A, C, D, E, F; and possibly for Scenario B. Requires future monitoring, will be conducted for the selected tolling scenario.

- PATH Hoboken Station (New Jersey), Stair 01/02: Monitor pedestrian volumes on Stair 01/02, then implement improved signage and wayfinding to divert some people from Stair 01/02 if agreed thresholds are met.

All passengers, including environmental justice populations, would benefit from the proposed mitigation measures and, consequently, the changes in transit ridership would not result in adverse effects on environmental justice populations.

17.6.1.7 Changes in Pedestrian Circulation on Sidewalks Near Transit Hubs

The CBD Tolling Alternative in all tolling scenarios would result in new pedestrian trips near transit hubs as a result of people who shift from driving to using transit as a result of the new toll. New pedestrian trips would occur at transit stations throughout the local study area, including areas that are in or adjacent to environmental justice census tracts. In addition, the sidewalks near transit stations throughout the local study area are already used by thousands of pedestrians each day, and some of these are minority and low-income populations.

Within the Manhattan CBD, walking and cycling are heavily used modes of travel because people often bike or walk between transit stations or parking lots and garages to reach their destination, and many others make their trips entirely by bicycle or on foot. Walking and cycling are also heavily used modes of travel in the local study area. Within the Manhattan CBD, and particularly the densely developed commercial and office corridors, and in the densely developed neighborhoods and communities in the local study area, pedestrian infrastructure elements (sidewalks, marked crosswalks, and pedestrian signals) are common.

Subchapter 4E, “Transportation: Pedestrians and Bicyclists,” examines the potential for new pedestrian trips to result in crowding at crosswalks, corners, and sidewalks near transit stations. In most cases, there is adequate capacity at corners and crosswalks and on sidewalks to absorb the additional pedestrian trips without adversely affecting pedestrian conditions there.

The analysis identified the potential for adverse effects to pedestrian flows in the Herald Square/Penn Station area (in the Manhattan CBD) on one sidewalk and two crosswalks. By repainting the crosswalks to widen the area available to legally cross the street and removing a planter on the sidewalk, the Project Sponsors will mitigate the adverse effects on pedestrian circulation at these three locations.

One of the affected locations (Seventh Avenue and West 32nd Street) is within an environmental justice census tract and the other two (Eighth Avenue between West 34th and West 35th Streets, and Sixth Avenue at West 34th Street) are adjacent to both environmental justice census tracts and non-environmental justice tracts. The Herald Square/Penn Station New York area is a major hub for transit and accommodates high volumes of pedestrians in peak and off-peak hours, and the proposed mitigation would alleviate the effects of increased pedestrian activity at the analysis locations, including effects on environmental justice populations.

Therefore, the change in pedestrian trips associated with the CBD Tolling Alternative would not result in adverse effects on environmental justice populations.

17.6.1.8 Potential for Indirect Displacement

During public outreach for the Project related to environmental justice, the Environmental Justice Technical Advisory Group raised concerns about the potential involuntary displacement of environmental justice populations.

Subchapter 5A, “Social Conditions: Population Characteristics and Community Cohesion,” presents an analysis of this issue that concludes that involuntary displacement would be unlikely to occur as a result of the CBD Tolling Alternative. The analysis concludes that the CBD Tolling Alternative would not result in changes in market conditions that would increase real estate values, so as to result in increased rents; the CBD Tolling Alternative would not result in an increase in the cost of goods within the Manhattan CBD; and certain residents of the Manhattan CBD would be entitled to a New York State tax credit to offset their tolls.

In terms of increased real estate values, any changes in residential patterns related to residents moving closer to transit would be broadly distributed throughout the regional study area because of the wide variety of factors that influence a household’s decision about where to live. In addition, in areas to which people might move to avoid the toll or be close to transit, the value of residential property and rents is already influenced by the existing proximity to transit. While there could be some additional value to living close to transit (i.e., the value of living near a commuter station) in the future with the CBD Tolling Alternative, there is value to such proximity under existing conditions. Within the Manhattan CBD in particular, residential property values are already well established and influenced by factors such as the area’s central location in New York City and its proximity to transit. While a reduction in traffic congestion could increase residential sales prices and thus could exert upward pressure on rents, this factor would not be substantial enough to markedly influence rents or residential property market conditions given the other factors already influencing New York City’s residential real estate market (i.e., its central location and proximity to transit, jobs, cultural amenities, etc.).

Moreover, the substantial number of apartments in the Manhattan CBD that have protected rents (e.g., apartments under the jurisdiction of the New York City Housing Authority and apartments that are protected by New York State’s rent control and rent stabilization laws) would not be subject to market-driven price increases. Furthermore, the Manhattan CBD already has the highest cost of living and highest home prices and rents in the region, and it is unlikely that many individuals would seek to move to the Manhattan CBD specifically to avoid the toll or because of a reduction in congestion. Therefore, the CBD Tolling Alternative would not substantively affect population characteristics of the Manhattan CBD or other transit hubs by attracting new residents seeking to avoid the toll.

Furthermore, the cost of new tolls with the CBD Tolling Alternative would not be likely to result in an increase in the cost of goods within the Manhattan CBD, as discussed below in **Section 17.6.1.9**.

In addition, residents whose primary residence is inside the Manhattan CBD and whose New York adjusted gross income for the taxable year is less than \$60,000 would be entitled to a New York State tax credit equal to the aggregate amount of Manhattan CBD tolls paid during the taxable year.

For these reasons, the CBD Tolling Alternative would not result in adverse effects on environmental justice populations related to indirect displacement.

17.6.1.9 Potential Effects on Cost of Goods

During public outreach for the Project related to environmental justice, the Environmental Justice Technical Advisory Group raised concerns about the potential for the introduction of a new CBD toll to affect the price of consumer goods in the Manhattan CBD.

Chapter 6, “Economic Conditions,” presents an analysis of the CBD Tolling Alternative’s potential to affect the price of goods in the Manhattan CBD, including the cost at smaller businesses such as local bodegas and delis. That analysis describes that the new CBD toll would increase the cost of shipping to the Manhattan CBD for some shippers (because of the price of the new toll) but reduce it for others (because of travel time savings and the potential for reduced parking fees). The specific change to costs would vary greatly depending on the toll rate, whether there is a cap on the number of tolls per day, and the number of times a truck is detected entering or remaining in the Manhattan CBD. Businesses in the Manhattan CBD that would be more likely to be affected by increased delivery costs associated by tolling increases are small businesses that have a high rate of deliveries, and most specifically small retail businesses such as grocery stores, restaurants, and small “bodega” market convenience stores, since they are dependent on frequent deliveries of smaller loads and delivery of goods represent a higher portion of their operating costs. There are approximately 600 such businesses within the Manhattan CBD, representing slightly less than 1 percent (0.7 percent) of all businesses within the Manhattan CBD.

The analysis in **Chapter 6** concludes that the incremental toll costs that are passed along to receiving businesses would be passed in a diluted fashion, because shippers would allocate the toll costs among the multiple receivers on a journey. Shippers to small retail stores like bodegas typically make many stops and consequently would share a toll cost would be shared among those multiple receivers. An incremental cost to any one retail store would be passed along as an incremental cost to consumers but would represent a very small component of the retail price charged to the consumer. Consequently, the CBD Tolling Alternative would be unlikely to result in an appreciable increase in the cost of goods in the Manhattan CBD.

17.6.2 Potential Adverse Effects in the Regional Study Area

The analysis considers the potential regional effects of the CBD Tolling Alternative on environmental justice populations for the topics identified in **Table 17-1** earlier in this chapter. It considers how implementation of the CBD Tolling Alternative would affect the regional population in terms of increased costs (tolls), changes in trip time, and changes in transit conditions. The discussion includes the following topics, based on the issues included in **Table 17-1**:

- Potential effects associated with the increased cost for drivers (**Section 17.6.2.1**)
- Potential effects on employment for taxi and FHV drivers (**Section 17.6.2.2**)

17.6.2.1 Increased Cost for Drivers

During early public outreach for the Project in fall 2021, members of the public raised concerns related to the increased cost of travel to the Manhattan CBD for low-income drivers, low- and middle-income families in the Manhattan CBD, and residents of the Manhattan CBD traveling regionally to visit family and friends outside the Manhattan CBD.

As discussed earlier, most people (76 percent) in the regional study area travel to and from the Manhattan CBD by public transportation using the region's robust transit network and the transit share is higher for minority and low-income populations (82 and 79 percent, respectively). With the CBD Tolling Alternative, most people, including minority and low-income populations, would continue to use public transportation to travel to and from the Manhattan CBD and would not be adversely affected by the new toll. With the new toll, some people would switch from driving to transit to travel to and from the Manhattan CBD. This is consistent with the purpose of the Project, which is to reduce traffic congestion in the Manhattan CBD.

Subchapter 5A, “Social Conditions: Population Characteristics and Community Cohesion,” describes that all areas of New York City outside the Manhattan CBD have transit access to the Manhattan CBD and would not be isolated from community services or ties within the Manhattan CBD. It also discusses that while most community facilities and services within the Manhattan CBD serve a local clientele, some do serve people in a wider area. Most community facilities and services in the Manhattan CBD are close to transit services, making this a viable mode choice for access to those community facilities. The analysis in **Subchapter 5A** concludes that since the majority of trips to and from the Manhattan CBD are made by transit, community cohesion and access to employment would not be adversely affected.

Given the region's robust transit network, most people, including minority and low-income populations, would have alternative travel options to avoid the CBD toll. However, for some people, switching to transit is not a viable option because they have poor access to transit, commuting by transit is inefficient with long travel times, they have work hours during times of limited transit service, or they need access to a private automobile for their work. For these individual drivers who do not have viable alternatives, the new toll would represent an adverse effect. Other people would choose to drive because it is more convenient for them and they would benefit from the reduced congestion within the Manhattan CBD.

The costs incurred by individuals driving to or through the Manhattan CBD would vary widely, depending on individual circumstances and the specific tolling scenario. The greatest cost would be incurred by those who make frequent driving journeys to the Manhattan CBD during peak hours. Driving to and from the Manhattan CBD is already expensive given the very limited availability of free or low-cost parking and the cost of off-street parking or taxi/FHV fares. Individuals who drive less frequently would incur lower costs because of the toll. **Appendix 4A.3, “Transportation: Representative Commuting Costs by Auto and Transit,”** presents information about the wide range of costs and travel times for people who travel to and through the Manhattan CBD today.

This section considers the specific effects of that increased cost on minority and low-income drivers.

Minority Drivers

As presented earlier in this chapter, more than half (about 52 percent) of the population of the regional study area identifies as minority and close to half of the people who work in the Manhattan CBD identify as minority. Most minority workers who commute to the Manhattan CBD use transit (82 percent). Approximately 10 percent of the minority workers (close to 73,000 people) commute by vehicle to the Manhattan CBD, a similar proportion to that of the overall population. These minority workers come from locations throughout the regional study area, with higher numbers coming from New York City and the immediately surrounding areas with higher populations and higher proportions of minority population. These areas are well-served by the regional public transportation network. For individual minority drivers who do not have viable alternatives other than driving to reach the Manhattan CBD, the new toll would represent an adverse effect.

One group of minority drivers who would be adversely affected by the new CBD toll is taxi and FHV drivers, who would need to pay the CBD toll for entering or remaining in the Manhattan CBD, including at the start of their work day, in tolling scenarios that do not have caps or exemptions for taxis and FHV drivers (Tolling Scenarios A, D, and G).¹⁷ According to the TLC's 2020 Fact Book, while about half of all FHV and taxi passenger pickups were in Manhattan, the majority of taxi and FHV drivers (80 percent) do not live in Manhattan. **Section 17.6.2.2** below provides more information on the potential effects of the CBD Tolling Alternative on taxi and FHV drivers.

Low-Income Drivers

An estimated 79 percent of low-income populations who work in the Manhattan CBD use transit to make their commute and approximately 9 percent rely on automobiles for their commute to work in Manhattan. An estimated 16,100 low-income people (including people who live within the Manhattan CBD) use an automobile for their commute to work in the Manhattan CBD.

These low-income workers come from locations throughout the regional study area, with higher numbers coming from New York City and the immediately surrounding areas with larger populations and higher proportions of low-income population. These areas are well-served by the regional public transportation network. Considering the availability of alternative modes of transit, many low-income drivers would have other alternatives available for their trip to work.

However, as noted earlier, switching to transit is not a viable option for some people, because they have poor access to transit, commuting by transit is inefficient with long travel times, they have work hours during times of limited transit service, or they need access to a private automobile for their work. For individual low-income drivers who do not have viable alternative modes other than driving to reach the

¹⁷ As detailed in **Section 17.6.2.2**, the Project Sponsors also considered modifications to these three tolling scenarios that would include caps and/or exemptions for taxi and FHV drivers.

Manhattan CBD, the new toll would represent an adverse effect. The size of cost increase would depend on the tolling scenario and each driver's specific route and travel patterns.

17.6.2.2 Effects on Taxi and For-Hire Vehicle Drivers in New York City

The analysis in **Chapter 6, “Economic Conditions,”** concludes that some tolling scenarios could reduce VMT by taxis and FHV, and particularly for yellow cabs operating in Manhattan. The predicted change in overall taxi/FHV travel characteristics indicates that there could be some shift in business practices within the industry, particularly for yellow cabs operating in Manhattan, where under some tolling scenarios the predicted reductions in VMT could exceed 10 percent. Under scenarios with predicted reductions in VMT, there could also be reductions in taxi and FHV employment, as described in this section.

According to TLC's 2020 Fact Book, there were 185,000 TLC-licensed drivers in New York City in 2019. In April 2022, 72,244 TLC-licensed drivers made at least one FHV trip in New York City, while 9,560 made at least one yellow taxi trip. A TLC-licensed driver can work for any sector of the industry (yellow cab, green cab, or FHV) at any time, if the license is active. In 2019 there were 13,587 yellow cabs, 2,895 green cabs, and 101,663 FHVs. In April 2022, there were 7,053 yellow cabs, 1,027 green cabs, and 70,281 FHVs that made at least one trip. The number of drivers was larger than the number of cabs and FHVs, because drivers typically share vehicles. Before the COVID-19 pandemic, the number of licensed yellow cabs was steady between 2015 and 2019, limited by the number of total medallions (permits for yellow cabs) available from the TLC. In contrast, the number of licensed green cabs decreased by 48 percent between 2016 and 2019 as the emerging FHV technology gained popularity and the number of licensed FHVs increased by 50 percent over that period.¹⁸

TLC-licensed vehicles completed more than 1,000,000 trips a day on average in 2019. Most trips in yellow cabs (97 percent) originated in Manhattan and most drop-offs occurred within the other four boroughs. According to the 2020 TLC Fact Book, 56 percent of the passenger pickups in Manhattan were by FHV and 45 percent were by taxi. Similarly, 54 percent of all passenger drop-offs in Manhattan were by FHV and 46 percent were by taxi. The 2020 TLC Fact Book notes that high-volume FHVs “are universally used both in and outside of Manhattan,” but does not provide more specific statistics.

The number of active vehicles differs from the number of licensed vehicles, because not every licensed vehicle is actively in use during a given time period. In 2018, during

New York City's Commitment to Supporting Taxi and FHV Drivers

In 2019, New York City became the first city in the world to implement a trip-based, guaranteed minimum pay standard for high-volume FHV drivers, whether they drive their own vehicle or lease an FHV. The TLC also modified rules for yellow and green taxis to increase driver income protections, including reducing the daily maximum credit card surcharge and increasing accessible dispatch fees.

In 2021, the City implemented a medallion relief program and loan guaranty program to provide relief for owners with five or fewer medallions. Both programs provide financial assistance and free legal representation to help negotiate with lenders to reduce loan balances and lower monthly payments.

¹⁸ New York City TLC. 2018 Fact Book and 2020 Fact Book.

https://www1.nyc.gov/assets/tlc/downloads/pdf/2018_tlc_factbook.pdf;
<https://www1.nyc.gov/assets/tlc/downloads/pdf/2020-tlc-factbook.pdf>.

peak activity periods, as many as 12,610 active yellow cabs, 4,026 green cabs, and 90,284 active FHV were providing trips in New York City.¹⁹

With the CBD Tolling Alternative, reductions in vehicle volumes and VMT in the Manhattan CBD and other locations within the regional study area would benefit taxi and FHV drivers. With less congestion and improved speeds, drivers can reach their customers more quickly and transport them to their destinations more quickly. By improving the trip times, the CBD Tolling Alternative could facilitate more fares during drivers' shifts and increase their receipts.

Under some tolling scenarios, there could be an increase in taxi and FHV fares that could reduce demand and industry revenues for taxis and/or FHVs. As detailed in **Chapter 2, “Project Alternatives,”** the tolling scenarios assess a variety of tolling policies for taxis and FHVs ranging from charging a toll each time a taxi or FHV enters the Manhattan CBD to a complete exemption from paying the Manhattan CBD toll. Tolling Scenarios A, D, and G would have no limit to the number of times taxis and FHVs would pay the CBD toll each day, Tolling Scenarios B and F would limit (cap) the number of times taxis and FHVs would pay the CBD toll to once each day, and Tolling Scenarios C and E would exempt taxis from the CBD toll and limit the number of times that FHVs would pay the toll to three times a day. In addition, in response to concerns expressed during the public outreach process with respect to the anticipated effects of the Project on taxi and FHV drivers, additional analyses were conducted of modified tolling scenarios with caps and exemptions for taxis and FHVs, as discussed later in this section.

The TLC requires that passengers reimburse the taxi driver for any toll costs during the trip; when no passengers are in the vehicle, drivers pay the toll today as part of the cost of doing business. TLC's rules for high-volume FHVs (i.e., Uber and Lyft) require that these FHV services collect and remit to the TLC information on the itemized fare for the trips charged to the passengers, including the fare, toll, taxes and gratuities. Any charge implemented as a result of the CBD Tolling Alternative would likely follow the existing framework. Thus, when present, the customer would be responsible for paying the tolls and the receipt would be itemized to show this. If no customer is present, the vehicle would be charged unless exempted or capped.

Table 17-12 shows the projected reductions in daily taxi/FHV VMT in New York City relative to the No Action Alternative for each of the tolling scenarios without modifications.²⁰ The VMT estimates shown in the table

Modified Tolling Scenarios Addressing Taxi/FHV Policies

- ❖ Tolling Scenario A with Tolls for Taxis/FHVs capped once per day
- ❖ Tolling Scenario D with Tolls for Taxis/FHVs capped once per day
- ❖ Tolling Scenario D with Taxi/FHV Tolling Exemption
- ❖ Tolling Scenario G with Tolls for Taxis/FHVs capped once per day

¹⁹ The New York City TLC's 2018 Fact Book presents an annual number for licensed yellow cab, green cab, and FHVs, while data on the number of active vehicles is reported on a monthly basis. In the case of green cabs, the highest monthly statistic for active vehicles (4,026 in January 2018) was greater than the number of reported average annual licensed vehicles (3,579 vehicles in 2018); this is likely due to a downward trend in licensed green cab vehicles over 2018. For this reason, the numbers of licensed and active vehicles should not be used to estimate the percentage of licensed vehicles that are active. This level of data is not provided in the 2020 Fact Book.

²⁰ Taxis and FHVs are a single mode in the Best Practice Model and therefore cannot be presented separately.

do not include cruising miles without a customer, and only reflect daily VMT for travel when the taxi/FHV has a customer. As shown in the table, the effects of the tolling scenarios would include the following:

- **Under Tolling Scenarios A, D, and G**, which would have uncapped tolls for both taxis and FHVs, there would be reductions in overall daily VMT in New York City for taxis and FHVs (by 5.1 percent, 8.8 percent, and 5.9 percent, respectively), and larger reductions in the Manhattan CBD, the core service area for yellow taxis, of 6.6 percent for Tolling Scenario A, 16.6 percent for Tolling Scenario D, and 8.6 percent for Tolling Scenario G. Reductions in Manhattan overall would be 10.9 percent for Tolling Scenario A, 16.7 percent for Tolling Scenario D, and 12.3 percent for Tolling Scenario G.
- **Under Tolling Scenarios B and F**, taxis and FHVs would be tolled a maximum once per day. There would be a nominal overall decrease in taxi/FHV VMT in New York City; under both these tolling scenarios there would be slight increases in taxi/FHV VMT within the Manhattan CBD (due to the relatively inelastic price sensitivity of auto commuters combined with the scenarios' easing congestion, which in turn would increase the utility of commuting by taxi/FHV within the Manhattan CBD). Reductions in Manhattan overall would be less than 3 percent.
- **Tolling Scenarios C and E, which would exempt taxis but would toll FHVs up to three times a day**, would result in 3.4 percent and 5.2 percent reductions in overall daily taxi/FHV VMT in New York City, respectively. In the Manhattan CBD, Tolling Scenario C would reduce VMT by 3.5 percent and Tolling Scenario E would reduce VMT by 7.9 percent; in Manhattan overall, VMT reductions would be larger. Given that taxis would not be tolled under Tolling Scenarios C and E, it is likely that taxis would experience increases in VMT while FHVs would experience greater VMT reductions. With Tolling Scenarios C and E, taxi drivers would not pay a toll, so there would be no additional toll cost for the driver or customer.

In addition, in response to concerns expressed during the public outreach process with respect to the anticipated effects of the Project on taxi and FHV drivers, the Project Sponsors considered modified Tolling Scenarios A and D with a cap on tolls of once per day for taxis and FHVs (like Tolling Scenarios B and F), a modified Tolling Scenario D with both taxis and FHVs exempt from the toll, and a variation of Tolling Scenario G (referred to as Tolling Scenario G1) with a cap on tolls of once per day for taxis and FHVs. The effects of the modifications would be as follows:

- **Tolling Scenario A with Tolls for Taxis/FHVs Capped at Once Per Day** – The cap would result in about 22 percent more taxis and FHVs entering the Manhattan CBD as compared to original Tolling Scenario A. To still meet the congestion and revenue objectives of the Project, tolls would need to be raised 10 percent to 15 percent on all vehicle classes in Tolling Scenario A to offset forgone taxi and FHV revenues. This would further reduce personal vehicles and trucks at the Manhattan CBD boundary by 2 percent to 3 percent compared to Tolling Scenario A. However, the decline in personal vehicles and trucks would be mostly offset by the increase in taxis and FHVs entering the Manhattan CBD. As a result, the volumes of all vehicles entering the Manhattan CBD would not change overall.

Table 17-12. Change in Taxi/For-Hire Vehicle Daily Vehicle-Miles Traveled in New York City vs. No Action Alternative, 2023

GEOGRAPHIC AREA	SCENARIO A	SCENARIO B	SCENARIO C	SCENARIO D	SCENARIO E	SCENARIO F	SCENARIO G
Taxi Toll Policy	All Entries	Once per Day	Exempt	All Entries	Exempt	Once per Day	All Entries
FHV Toll Policy	Up to 3 Times Daily	Up to 3 Times Daily					
Bronx County	-8,392 (-3.1%)	-5,717 (-2.1%)	-6,426 (-2.4%)	-9,346 (-3.4%)	-3,991 (-1.5%)	-1,959 (-0.7%)	-7,831 (-2.9%)
Kings County (Brooklyn)	-33,855 (-9.1%)	-20,648 (-5.5%)	-10,247 (-2.7%)	-37,923 (-10.2%)	-27,854 (-7.5%)	-7,095 (-1.9%)	-39,183 (-10.5%)
New York County (Manhattan)	-77,843 (-10.9%)	-19,553 (-2.7%)	-51,989 (-7.3%)	-119,349 (-16.7%)	-73,223 (-10.2%)	-17,076 (-2.4%)	-87,944 (-12.3%)
Inside Manhattan CBD	-21,498 (-6.6%)	+15,020 (+4.6%)	-11,371 (-3.5%)	-54,476 (-16.8%)	-25,621 (-7.9%)	+4,962 (+1.5%)	-27,757 (-8.6%)
Outside Manhattan CBD	-56,345 (-14.4%)	-34,573 (-8.8%)	-40,618 (-10.4%)	-64,873 (-16.6%)	-47,602 (-12.2%)	-22,038 (-5.6%)	-60,187 (-15.4%)
Queens County	-3,873 (-0.4%)	+21,258 (+2.0%)	-10,804 (-1.0%)	-47,911 (-4.4%)	-19,342 (-1.8%)	+4,979 (+0.5%)	-7,812 (-0.7%)
Richmond County (Staten Island)	-4,884 (-8.6%)	-5,071 (-8.9%)	-4,940 (-8.7%)	-4,539 (-8.0%)	-6,002 (-10.5%)	-4,370 (-7.7%)	-4,917 (-8.6%)
NEW YORK CITY TOTAL	-128,847 (-5.1%)	-29,731 (-1.2%)	-84,406 (-3.4%)	-219,068 (-8.8%)	-130,412 (-5.2%)	-25,521 (-1.0%)	-147,687 (-5.9%)

Source: Best Practice Model, WSP 2021.

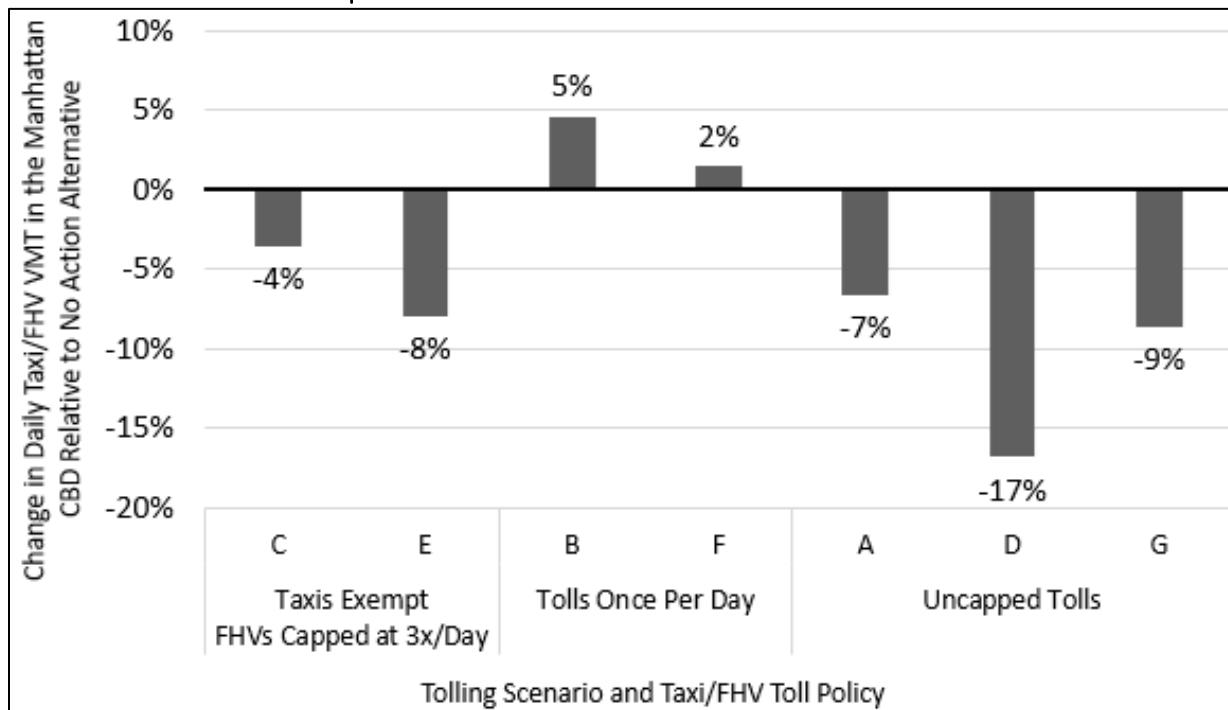
Note: Projections include VMT only during fares and do not include cruising without passenger(s).

- **Tolling Scenario D with Tolls for Taxis/FHVs Capped at Once Per Day** – The cap would result in about 25 percent more taxis and FHVs entering the Manhattan CBD compared to the original Tolling Scenario D. Since original Tolling Scenario D (with uncapped tolling of taxis and FHVs) would have annual net revenue higher than the Project objectives by about \$300 million, this modified Tolling Scenario D would continue to meet the revenue objective without needing to raise toll rates from those in original Tolling Scenario D.
- **Tolling Scenario D with Taxi/FHV Tolling Exemption** – Exempting taxis and FHVs from the Manhattan CBD toll would increase the number of additional taxis and FHVs entering the Manhattan CBD by up to 50 percent compared to original Tolling Scenario D. No change in the toll rate would be required for this modified tolling scenario.
- **Tolling Scenario G with Tolls for Taxis/FHVs Capped at Once Per Day** – Capping the tolls paid by taxis and FHVs would reduce the VMT for taxis and FHVs in New York City by 1.7 percent relative to the No Action Alternative. In the Manhattan CBD, VMT for taxis and FHVs would increase relative to the No Action Alternative by 3.1 percent. Given this cap, toll rates for other vehicles would be approximately 10 percent higher than in original Tolling Scenario G. This toll increase was low enough so as not to notably affect the results from Tolling Scenario G. More importantly, with this modification Tolling Scenario G would still address the concerns regarding commercial truck traffic in the South Bronx, although the daily number of trucks on the Cross Bronx Expressway at Macombs Road would increase

from 50 with original Tolling Scenario G to 251 in this modified scenario, which is still lower than every other tolling scenario except Tolling Scenario C.

Figure 17-10 illustrates how the different tolling policies would affect taxi and FHV VMT. Exemptions and caps decrease the toll burden on taxi/FHV drivers, while increasing the toll rate for other drivers to meet the Project's congestion and revenue objectives. If taxis and FHVs are charged for each trip, the demand for their service would decline, particularly in New York City, reducing trips and better meeting the Project objectives, but creating new direct costs and/or potential job insecurity.

Figure 17-10. Changes in Daily Taxi/FHV VMT in the Manhattan CBD, CBD Tolling Alternative Tolling Scenarios Compared to the No Action Alternative



Source: Best Practice Model, WSP 2021.

Under tolling scenarios that would toll taxis and/or FHVs more than once a day, customers could choose to avoid the toll by switching to transit, walking, or biking to their destination in the Manhattan CBD, thereby reducing the frequency of taxi/FHV utilization. The potential decrease in overall demand for taxis and/or FHVs in Manhattan, ranging from 7 percent to 17 percent in tolling scenarios without a once-a-day cap on taxi/FHV tolls, could reduce employment in the taxi and/or FHV industries. This would occur in unmodified Tolling Scenarios A, D, and G; for FHV drivers, it would also occur in Tolling Scenarios C and E. The projected reductions in VMT indicate potential economic costs within an industry in flux where journeys have already been shifting from taxis to FHVs and could correlate to lost revenues for both taxis and FHVs operating in New York City. Since driver income is directly related to the miles they travel with paying customers, these reductions could result in reductions in taxi and FHV employment. Thus, tolling scenarios that toll taxis and/or FHVs more than once a day would result in an adverse effect on the drivers of those vehicles in New York City, who largely identify as minority populations.

17.6.3 Conclusions: Potential Adverse Effects on Environmental Justice Populations

Based on the information presented in the previous subsections of **Section 17.6**, the CBD Tolling Alternative would not result in adverse effects on environmental justice populations in most of the topic areas reviewed. **Table 17-13** summarizes the results of the analysis.

The Project would result in the following potential adverse effects on environmental justice populations:

- The increased cost to drivers with the new CBD toll in all tolling scenarios would adversely affect minority and low-income drivers who currently drive to the Manhattan CBD and do not have alternative transportation modes available.
- Tolling Scenarios that would toll taxis and/or FHVs once or more a day (unmodified Tolling Scenarios A, D, and G; and Tolling Scenarios C and E for FHV drivers) would adversely affect taxi and/or FHV drivers in New York City, who largely identify as minority populations, as follows:
 - The cost of the new toll would adversely affect taxi and FHV drivers, who would need to pay the Manhattan CBD toll, including at the start of their workday, in tolling scenarios that toll their vehicles more than once a day.
 - The new CBD toll would reduce VMT associated with taxis and/or FHVs in Manhattan. Since the income of taxi and FHV drivers is directly related to the miles they travel with paying customers, this would reduce the income of taxi and FHV drivers and this reduction would be large enough that job losses could occur in tolling scenarios that toll their vehicles more than once a day.

In Tolling Scenarios B and F, and the modified Tolling Scenarios A, D, and G, these adverse effects would not occur.

Table 17-13. Summary of Potential Adverse Effects on Environmental Justice Populations

EA CHAPTER/ ENVIRONMENTAL CATEGORY TOPIC	SUMMARY OF EFFECTS	LOCATION	ADVERSE EFFECT: GENERAL POPULATION?	ANALYSIS OF ADVERSE EFFECT ON ENVIRONMENTAL JUSTICE POPULATIONS?	ANALYSIS CONCLUSION
4A - Regional Transportation	Traffic Results: Some diversions to different crossings to Manhattan CBD or around the Manhattan CBD altogether, depending on tolling scenario. As traffic, including truck trips, increase on some circumferential highways, simultaneously there is a reduction in traffic on other highway segments to the CBD.	Roadways throughout the 28-county study area; greatest effect closest to Manhattan CBD	No	Based on public comments, required further evaluation; see Sections 17.6.1.1 and 17.6.1.2	No adverse effect on environmental justice populations
4B – Transportation: Highways and Local Intersections	The introduction of the CBD Tolling Program may produce increased congestion on highway segments approaching on circumferential roadways used to avoid Manhattan CBD tolls, resulting in increased delays and queues in midday and PM peak hours on certain segments in some tolling scenarios: Westbound Long Island Expressway (I-495) near the Queens-Midtown Tunnel (midday) Approaches to westbound George Washington Bridge on I-95 (midday) Southbound and northbound FDR Drive between East 10th Street and Brooklyn Bridge (PM) Other locations will see an associated decrease in congestion particularly on routes approaching the Manhattan CBD.	Three highway segments	Yes	Yes; see Section 17.6.1.1	No adverse effect on environmental justice populations
	Shifts in traffic patterns, with increases in traffic at some locations and decreases at other locations, would change conditions at some local intersections within and near the Manhattan CBD. Of the 102 intersections analyzed, most intersections would see reductions in delay.	363 locations (All Day) 102 locations (AM, Midday, and PM) 57 locations (Overnight)	Yes	Yes; see Section 17.6.1.2	No adverse effect on environmental justice populations
	Potential adverse effects on four local intersections in Manhattan: Trinity Place and Edgar Street (midday); East 36th Street and Second Avenue (midday); East 37th Street and Third Avenue (midday); East 125th Street and Second Avenue (AM, PM)	Four locations with potential adverse effects that would be addressed with signal timing adjustments	Yes	Yes; see Section 17.6.1.2	No adverse effect on environmental justice populations

Table 17-13. Summary of Potential Adverse Effects on Environmental Justice Populations

EA CHAPTER/ ENVIRONMENTAL CATEGORY TOPIC	SUMMARY OF EFFECTS	LOCATION	ADVERSE EFFECT: GENERAL POPULATION?	ANALYSIS OF ADVERSE EFFECT ON ENVIRONMENTAL JUSTICE POPULATIONS?	ANALYSIS CONCLUSION
4C – Transportation: Transit	<p>The Project would generate a dedicated revenue source for investment in the transit system.</p> <p>Transit ridership would increase by 1 to 2 percent systemwide for travel to and from the Manhattan CBD, because some people would shift to transit rather than driving. Increases in transit ridership would not result in adverse effects on line-haul capacity on any transit routes.</p>	Regional public transportation system	No	Based on public comments, required further evaluation; see Section 17.6.1.5	No adverse effect on environmental justice populations
4C – Transportation: Transit (Cont'd)	Transit Stations: Increased ridership would affect passenger flows at transit stations, with the potential for adverse effects at certain vertical circulation elements (i.e., stairs and escalators) in five transit stations	Hoboken Terminal – PATH station 42 St-Times Square – subway station (Manhattan) Flushing-Main St subway station (Queens) Union Sq subway station (Manhattan) Court Sq subway station (Queens)	Yes Yes Yes Yes Yes	Yes; see Section 17.6.1.6	No adverse effect on environmental justice populations
4E – Transportation: Pedestrians and Bicycles	Pedestrian Circulation: Increased pedestrian activity on sidewalks outside transit hubs because of increased transit use. At most locations, increases not large enough to result in adverse effects. At one location in the Manhattan CBD, the increase could adversely affect pedestrian circulation.	Herald Square/Penn Station NY	Yes	Yes; see Section 17.6.1.7	No adverse effect on environmental justice populations

Table 17-13. Summary of Potential Adverse Effects on Environmental Justice Populations

EA CHAPTER/ ENVIRONMENTAL CATEGORY TOPIC	SUMMARY OF EFFECTS	LOCATION	ADVERSE EFFECT: GENERAL POPULATION?	ANALYSIS OF ADVERSE EFFECT ON ENVIRONMENTAL JUSTICE POPULATIONS?	ANALYSIS CONCLUSION
5A – Social Conditions: Population	Community Cohesion: Changes to travel patterns, including increased use of transit, and increased cost for people who drive to the CBD	28-county study area	No	Based on public comments, required further evaluation see Sections 17.6.1.5, 17.6.1.6, and 17.6.2.1	Potential adverse effect on low-income drivers who do not have alternative transportation modes to reach the Manhattan CBD
	Indirect Displacement: No notable changes in socioeconomic conditions or cost of living so as to induce potential involuntary displacement of residents	Manhattan CBD	No	Based on public comments, required further evaluation; see Section 17.6.1.8	No adverse effect on environmental justice populations
	Access to Employment: Increased cost for people who drive to work in the Manhattan CBD	28-county study area	No	Based on public comments, required further evaluation; see Section 17.6.2.1	Potential adverse effect on low-income drivers who do not have alternative transportation modes to reach the Manhattan CBD (all tolling scenarios)

Table 17-13. Summary of Potential Adverse Effects on Environmental Justice Populations

EA CHAPTER/ ENVIRONMENTAL CATEGORY TOPIC	SUMMARY OF EFFECTS	LOCATION	ADVERSE EFFECT: GENERAL POPULATION?	ANALYSIS OF ADVERSE EFFECT ON ENVIRONMENTAL JUSTICE POPULATIONS?	ANALYSIS CONCLUSION
6 - Economic Conditions	Price of Goods: Cost of new toll would not result in changes in the cost of most consumer goods in the Manhattan CBD	Manhattan CBD	No	Based on public comments, required further evaluation; see Section 17.6.1.9	No adverse effect on environmental justice populations
	Taxi and FHV Drivers: Depending on the tolling scenario, the toll could reduce taxi and FHV revenues for New York City drivers due to a reduction in taxi/FHV VMT with passengers within the CBD. The industry would remain viable overall, but adverse effects, including job losses, could occur to taxi and FHV drivers.	New York City	No	Yes; see Section 17.6.2.2	Potential adverse effect on New York City taxi and/or FHV drivers, who largely identify as minority populations, due to the cost of the new toll and potential job losses related to reductions in VMT in tolling scenarios that toll their vehicles more than once a day (unmodified Tolling Scenarios A, D, and G; and Tolling Scenarios C and E for FHV drivers)

Table 17-13. Summary of Potential Adverse Effects on Environmental Justice Populations

EA CHAPTER/ ENVIRONMENTAL CATEGORY TOPIC	SUMMARY OF EFFECTS	LOCATION	ADVERSE EFFECT: GENERAL POPULATION?	ANALYSIS OF ADVERSE EFFECT ON ENVIRONMENTAL JUSTICE POPULATIONS?	ANALYSIS CONCLUSION
10 - Air Quality	Regional Air Quality Benefits: On a regional (mesoscale) level, reductions in VMT would reduce air pollutants and greenhouse gases	28-county study area	No	Based on public comments, required further evaluation; see Section 17.6.1.3	No adverse effect on environmental justice populations
	Local Intersections: Changes in air emissions at local intersections due to traffic volume changes	Local intersections	No		
	Highway Segments: Changes in air emissions on highway due to traffic volume changes	Selected highway segments	No		
	Truck Volume Changes: Changes in emissions related to truck traffic diversions	Circumferential roadways near the CBD	No		
12 – Noise	Traffic-Related Noise: Imperceptible increases or decreases in noise levels resulting from changes in traffic volumes	Bridge and tunnel crossings and local streets	No	Based on public comments, required further evaluation; see Section 17.6.1.4	No adverse effect on environmental justice populations

17.6.4 Offsetting Benefits

While the introduction of a new CBD toll would result in adverse effects to individuals who currently drive to the Manhattan CBD and do not have alternative transportation modes available, the CBD Tolling Alternative would also have substantial benefits associated with reduced vehicle congestion in the Manhattan CBD, a primary goal of the Project. The Project would address the demonstrated need to reduce vehicle congestion in the Manhattan CBD, which would benefit all drivers traveling to and near the Manhattan CBD, especially those who value their travel-time savings more than the toll cost. The reduced congestion would produce other related benefits in the Manhattan CBD, including travel-time savings, improved travel-time reliability, reduced vehicle operating costs, improved safety for vehicles, pedestrians, and bicyclists, and improved air quality in the Manhattan CBD and regionwide.

These congestion-reduction benefits would result in economic benefits as well. Travel-time savings associated with both work and non-work journeys are an economic benefit because they increase a person's productivity and overall utility by reducing time spent on less productive activities (i.e., traveling to a destination). In addition, reductions in vehicle volumes and VMT in the Manhattan CBD and other locations within the regional study area would benefit those who continue to drive in the Manhattan CBD, including delivery vehicles and taxi and FHV drivers. With less congestion and improved speeds, drivers can reach their customers more quickly and transport them to their destinations more quickly. By improving the trip times, the CBD Tolling Alternative could facilitate more fares during taxi and FHV drivers' shifts and increase their receipts. Reduced congestion would also facilitate the more efficient and cost-effective distribution of goods and services by truck in the Manhattan CBD. Transit riders who use buses, including minority and low-income passengers, would benefit from the CBD Tolling Alternative through congestion reduction that would result in travel-time savings, improved travel-time reliability, and improved safety.

Reduced regional air pollution would provide an important benefit to all residents of the region, particularly for environmental justice populations who experience adverse health effects related to air pollution, such as asthma. Most environmental justice populations who live in the Manhattan CBD would experience lower localized pollutant emissions due to reduced traffic. Additional information on where traffic would decrease is provided in **Subchapter 4A, “Transportation: Regional Transportation Effects and Modeling,”** and described and illustrated earlier in this chapter in **Section 17.6.1.3.**

In addition, the CBD Tolling Alternative would establish a reliable, recurring local source of funding for MTA capital projects, which would allow MTA to reinvest in and improve its transportation network. As discussed earlier, approximately 76 percent of the people who travel to the Manhattan CBD for work use public transportation to make their trip and this percentage is higher for minority commuters (82 percent) and low-income commuters (79 percent). MTA's transportation network is critical for mobility in the region, and improvements to the network would allow it to absorb increasing transit ridership and further reduce vehicle congestion.

17.7 POTENTIAL DISPROPORTIONATELY HIGH AND ADVERSE EFFECTS

USDOT Order 5610.2C and FHWA Order 6640.23A require FHWA to identify whether its actions could have a disproportionately high and adverse effect on low-income and minority populations, after accounting for mitigation and offsetting benefits.

USDOT Order 5610.2C and FHWA Order 6640.23A both define a disproportionately high and adverse effect on an environmental justice population occurs when the following occurs:

- An adverse effect is predominantly borne by a minority population and/or a low-income population; or
- An adverse effect would occur to a minority population and/or low-income population that would be appreciably more severe or greater in magnitude than the adverse effect that would occur to the non-minority population and/or non-low-income population.

USDOT Order 5610.2C and FHWA Order 6640.23A both describe that in making determinations regarding disproportionately high and adverse effects on minority and low-income populations, mitigation and enhancement measures that will be implemented and all offsetting benefits to the affected minority and low-income populations may be taken into account, as well as the design, comparative impacts, and the relevant number of similar existing system elements in non-minority and non-low-income areas.

Based on the previous steps in this analysis, the CBD Tolling Alternative would result in two potential adverse effects on environmental justice populations, after taking into account measures to avoid, minimize or otherwise mitigate adverse effects and taking into account offsetting benefits: 1) a potential adverse effect on minority and low-income drivers due to the increased cost associated with the new toll; and 2) a potential adverse effect on minority taxi and FHV drivers resulting from a decrease in employment.

17.7.1 Evaluation of Adverse Effect on Minority and Low-Income Drivers

The previous sections of this chapter describe that most people in the regional study area travel to and from the Manhattan CBD by public transportation using the region's robust transit network. With the CBD Tolling Alternative, most people, including minority and low-income populations, would continue to use public transportation to travel to and from the Manhattan CBD and would not be adversely affected by the new toll.

Most people who currently drive to the Manhattan CBD have alternative travel options to avoid the CBD toll. However, for some people, switching to transit is not a viable option because they have poor access to transit, commuting by transit is inefficient with long travel times, they have work hours during times of limited transit service, or they need access to a private automobile for their work. For these individual drivers who do not have viable alternatives, the increased cost of travel to the Manhattan CBD due to the new toll would represent an adverse effect. The size of cost increase would depend on the tolling scenario and each driver's specific route and travel patterns.

17.7.1.1 *Minority Drivers*

The effect of the cost associated with the new CBD toll on minority drivers who have no viable alternative mode for reaching the Manhattan CBD other than private vehicle would be the same effect as experienced by the general population. This effect would not be predominantly borne by a minority population. As discussed earlier, approximately 52 percent of the region's population identifies as minority, and slightly less than half of the people who travel to the Manhattan CBD for work identify as minority. About 10 percent of the minority commuters to the Manhattan CBD, or approximately 73,000 commuters, commute by private vehicles. This is approximately 5 percent of all commuters to the Manhattan CBD.

In addition, the adverse effect on minority drivers would not be more severe or greater in magnitude for the minority population than for the general population.

Consequently, the potential adverse effect on minority drivers associated with the cost of the new toll would not be a disproportionately high and adverse effect.

17.7.1.2 *Low-Income Drivers*

The cost of the new CBD toll would not be predominantly borne by low-income drivers. As described earlier, approximately 14 percent of the region's commuters to the Manhattan CBD are low-income and 9 percent of the people who drive to the Manhattan CBD are low-income.

However, for low-income drivers who have no viable alternative to reach the Manhattan CBD other than private vehicle, the effect of that cost would be appreciably more severe than the effect on the non-low-income population, because the cost of the toll would represent a larger proportion of each driver's available income. The specific cost associated with the new toll would vary for each driver, depending on the route, time of day, frequency of the trip, and the tolling scenario. In addition, while the lowest tolls would be available to drivers who use E-ZPass, some low-income drivers may have difficulty maintaining an E-ZPass account. There is no fee for setting up an E-ZPass account and TBTA already offers a Pay-Per-Trip option and a Reload Card for cash customers to replenish their E-ZPass. However, there is a \$10 refundable deposit required for customers who do not have a credit card account linked to their account.

Overall, therefore, the adverse effect on low-income drivers associated with the cost of the new toll would constitute a disproportionately high and adverse effect.

17.7.2 Evaluation of Adverse Effect on Taxi and FHV Drivers

A potential adverse effect would occur to taxi and/or FHV drivers in New York City, who largely identify as minority populations, in tolling scenarios that toll their vehicles more than once a day. This would occur in unmodified Tolling Scenarios A, D, and G; for FHV drivers it would also occur in Tolling Scenarios C and E. The adverse effect would be related to the cost of the new CBD toll and the reduction of VMT for taxis and/or FHVs, which would result in a decrease in revenues that could lead to losses in employment. This adverse effect would occur predominantly to a minority population and therefore would be a disproportionately high and adverse effect.

17.8 FURTHER EVALUATION FOR POTENTIAL DISPROPORTIONATELY HIGH AND ADVERSE EFFECTS

USDOT Order 5610.2C and FHWA Order 6640.23A state that FHWA will ensure that any actions that have the potential for a disproportionately high and adverse effect on minority or low-income populations will only be carried out if:

1. "Further mitigation measures or alternatives that would avoid or reduce the disproportionately high and adverse effect are not practicable."
2. "A substantial need for the program, policy or activity exists, based on the overall public interest."
3. "Alternatives that would have less adverse effects on protected populations have either: (a) adverse social, economic, environmental, or human health impacts that are severe; or (b) would involve increased costs of extraordinary magnitude."

USDOT Order 5610.2C and FHWA Order 6640.23A further explain, "In determining whether a mitigation measure or an alternative is 'practicable,' the social, economic (including costs) and environmental effects of avoiding or mitigating the adverse effects will be taken into account."

17.8.1 Substantial Need for CBD Tolling Program

As described in **Chapter 1, "Introduction,"** the purpose of the Project is to reduce traffic congestion in the Manhattan CBD in a manner that will generate revenue for future transportation improvements, pursuant to acceptance into FHWA's Value Pricing Pilot Program. **Chapter 1** also documents the compelling need for the Project, including the need to reduce vehicle congestion in the Manhattan CBD and the need to create a new, local recurring funding source for MTA's capital projects.

17.8.2 No Other Alternatives Available

In consideration of a range of potential strategies for reducing congestion, and in light of the purpose, need, and objectives for this Project, FHWA and the Project Sponsors evaluated 12 preliminary alternatives described in **Chapter 2, "Project Alternatives."** Based on that evaluation, FHWA and the Project Sponsors determined that only one alternative, the CBD Tolling Alternative, would meet the established purpose and need and all of the Project objectives. Therefore, the CBD Tolling Alternative is the only reasonable alternative for the Project.

17.8.3 Mitigation for Potential Disproportionately High and Adverse Effect on Low-Income Drivers

For low-income travelers, a wide variety of discounted and lower cost transportation options are currently available in the New York City metropolitan region, including:

- **Transit Fare Discount for Individuals in Low-Income Households.** Beyond the Manhattan CBD, New York City residents between the ages of 18 and 64 who reside in a household with an income below the Federal poverty threshold, and are not receiving full carfare from the Department of Social Services/Human Resources Administration or any other New York City agency, are eligible for the Fair

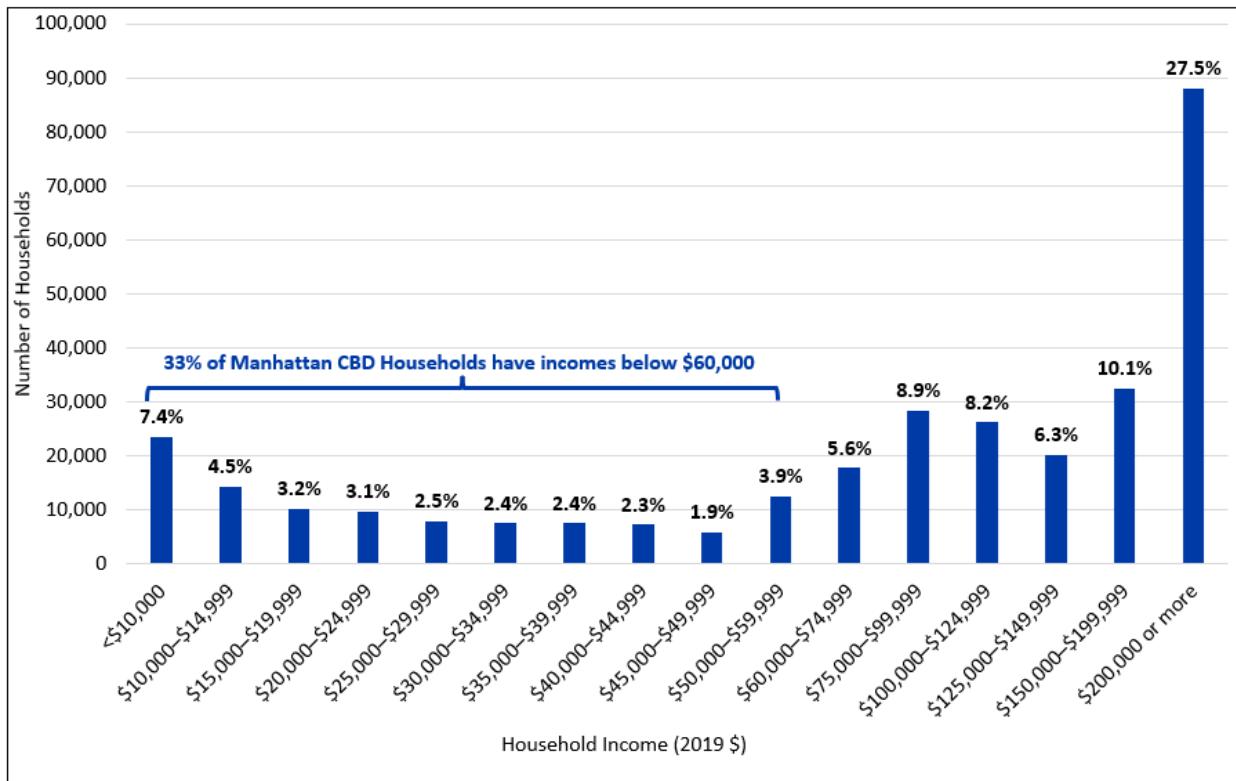
Fares program, which allows travel at half the full fare cost on MTA subway; local, limited, and SBS buses; and Access-A-Ride paratransit.

- **Transit Fare Discount for Persons with Disabilities and Those 65 Years of Age and Older.** Even broader geographically, MTA subway, bus, and rail riders who are 65 and older or are persons with disabilities are eligible for a Reduced Fare program, which allows travel on transit at half the full fare cost. This program is not restricted to New York City residents.
- **Student Transit Fare Discount.** MTA works with the New York City Department of Education so that students have access to education. Student MetroCards²¹ are distributed by schools to students whose home is one-half mile or farther from their school. These MetroCards allow three free rides each school day between 5:30 a.m. and 8:30 p.m., including free transfers between buses or between the subway and local, limited, and SBS buses.
- **Free Ferry Service.** The Staten Island Ferry, which operates 24 hours a day, seven days a week, every day of the year, runs free ferry service from Staten Island to the Manhattan CBD.
- **Reduced-Fare Bike Share.** Citi Bike, in partnership with Healthfirst and NYCDOT, provides reduced cost membership of \$5/month (roughly one-third the typical membership) for low-income individuals 16 years and older who are residents of New York City Housing Authority facilities or receive Supplemental Nutrition Assistance Program (SNAP) benefits.
- **24-Hour Public Transportation Widely Available.** As described in other chapters of this EA, New York City and the surrounding region has an extensive regional transportation network that operates seven days a week all year long. The services within New York City operate 24 hours a day.
- **E-ZPass Payment Options.** To make the convenience of E-ZPass available for as many customers as possible, TBTA offers a Pay-Per-Trip option and a Reload Card for customers without credit cards to replenish their E-ZPass.

Even with all of these programs offered or supported by the Project Sponsors, as discussed earlier, the cost of the new toll would result in a disproportionately high and adverse effect on low-income populations who need to drive into and out of the Manhattan CBD. To address this adverse effect on low-income drivers, the Project Sponsors will implement the following mitigation measures:

- **Tax Credit for Tolls Paid:** The Project will include a tax credit for CBD tolls paid by residents of the Manhattan CBD whose New York adjusted gross income for the taxable year is less than \$60,000. (As shown in **Figure 17-11**, 33 percent of the households in the Manhattan CBD have household incomes below \$60,000.) TBTA will coordinate with the New York State Department of Taxation and Finance (NYS DTF) so that documentation that may be needed for those eligible for the New York State tax credit is available.
- **Education/Outreach/Coordination on the Tax Credit:** TBTA will post information on the Project website related to the tax credit and a link to the appropriate location on the NYS DTF website that guides eligible drivers to information on filing their taxes.

²¹ MetroCard is the primary payment method for the New York City subway and New York City and MTA buses.

Figure 17-11. Income Distribution for Households in the Manhattan CBD

Source: U.S. Census Bureau, ACS 2015-2019 5-Year Estimates.

- **Elimination of the E-ZPass Tag Deposit Fee:** For all drivers, the best way to reduce toll costs associated with the CBD Tolling Program would be to use E-ZPass, since toll rates would be lower for those who use E-ZPass than for those who do not. As noted, TBTA already offers a Pay-Per-Trip option and a Reload Card for cash customers to replenish their E-ZPass. However, there is a \$10 refundable deposit required for customers who do not have a credit card account linked to their account. Recognizing that these tend to be low-income customers, TBTA, as one of the Project Sponsors, will eliminate the required refundable deposit for customers who want E-ZPass but do not have a credit card connected to their account. This will benefit all TBTA E-ZPass tag holders who do not have a credit card connected to their account, whether or not they drive to the Manhattan CBD.
- **Enhanced Promotion of Existing E-ZPass Payment and Plan Options:** TBTA will provide enhanced promotion of existing E-ZPass payment and plan options, including the ability for drivers to pay per trip (rather than a pre-load balance) and refill their accounts with cash at participating retail partners.
- **Education/Outreach on Transit Discounts:** TBTA will coordinate with MTA to provide outreach and education on eligibility for existing discounted transit fare products and programs, including those for individuals 65 years of age and older, those with disabilities, and those with low incomes, about which many may not be aware.
- **Establishment of an Environmental Justice Community Group:** The Project Sponsors commit to establishing an Environmental Justice Community Group that would meet on a bi-annual basis, with

the first meeting six months after Project implementation, to share updated data and analysis and hear about potential concerns.

In addition, the Project Sponsors are committed to implementing the following enhancement:

- **Enhancement: Prioritizing Equity in Improving Bus Service in New York City:** New York City's buses serve a greater share of low-income and minority households compared to other modes of transportation, including subways. MTA developed an approach which combines considerations of equity and air quality to identify Equity Priority Areas for its bus network redesigns. Equity Priority Areas are used to target improvements and investments to promote equity and access to opportunities in these transit-dependent, historically marginalized and underserved areas to promote equitable transportation and access to opportunities. The recently implemented bus network redesigns in Staten Island and the Bronx have been well-received. Network redesigns in Queens and Brooklyn are progressing. TBTA commits to working with NYCT to address areas identified in the EA where bus service could be improved as the Brooklyn and Manhattan Bus Network Redesigns move forward.

17.8.4 Mitigation for Potential Disproportionately High and Adverse Effect on Taxi and FHV Drivers

To address the disproportionately high and adverse effects on taxi and/or FHV drivers, the Project Sponsors will implement the following mitigation for taxi and/or FHV drivers if a tolling scenario is implemented with tolls of more than once per day for their vehicles:

- **Mitigation Related to Toll Cost:** The Project Sponsors commit to working with the appropriate city and state agencies so that when passengers are present, they pay the toll, rather than the driver.
- **Mitigation Related to Potential Job Losses:**
 - TBTA will work with NYCT to institute an Employment Resource Coordination Program to connect drivers experiencing job insecurity with a direct pathway to licensing, training, and job placement with MTA or its affiliated vendors at no cost to the drivers (the \$60-\$70 fee for a bus operator's exam will be waived, and the \$10 fee for a commercial driver's license test will be reimbursed). This program will include resources and information on how to become a driver with MTA's paratransit carriers or a bus or train operator.
 - For those who may not want a commercial driver's license, TBTA will coordinate with MTA to submit a request to the Federal Transit Administration (FTA) for a pilot program that will increase eligibility of taxi and FHV drivers to use their vehicles to provide paratransit trips and will implement this program if approved. This will increase work opportunities for roughly 140,000 TLC-licensed drivers and improve service quality for the nearly 170,000 paratransit customers eligible for paratransit service through MTA's Access-A-Ride program. Drivers wishing to be part of the Access-A-Ride broker program would still need to meet broker driving training requirements, including training to work with people with disabilities. If FTA approves the program, the six-month pilot program could begin ahead of implementation of the CBD Tolling Program and will include data collection to measure progress and test the pilot program against a set of key performance indicators. MTA will produce a report to summarize the pilot program performance after six months for evaluation by

MTA, FTA, and the TLC. Should the pilot program show progress toward success, MTA will propose that the pilot continue for a full year. If the pilot program shows success after one year, MTA, FTA, and the TLC may extend the pilot program, making the program permanent, or discontinue the pilot and return to existing policy.

17.9 CONCLUSION

Consistent with USDOT Order 5610.2C and FHWA Order 6640.23A, the environmental justice analysis included a review of Project effects to identify appropriate study areas, identification of existing minority and low-income populations in the study areas, identification of potential adverse effects of the Project on environmental justice populations, and consideration of whether the CBD Tolling Alternative would result in disproportionately high and adverse effects on environmental justice populations.

Public engagement is a critical component of USDOT's and FHWA's policies and practices related to environmental justice. FHWA and the Project Sponsors conducted an extensive early public outreach program for the Project during preparation of this EA with a specific focus on coordinating with and obtaining feedback environmental justice populations and representatives of environmental justice communities that could be affected by the Project.

The environmental justice analysis concluded that the CBD Tolling Alternative would not result in adverse effects on environmental justice populations in most of the topic areas reviewed. However, the Project would result in disproportionately high and adverse effects on environmental justice populations, as follows:

- The increased cost to drivers with the new CBD toll would have a potentially disproportionately high and adverse effect on low-income drivers who currently drive to the Manhattan CBD and do not have alternative transportation modes available.
- A potential disproportionately high and adverse effect would occur to taxi and FHV drivers in New York City, who largely identify as minority populations, in tolling scenarios that toll their vehicles more than once a day. This would occur in unmodified Tolling Scenarios A, D, and G; for FHV drivers, it would also occur in Tolling Scenarios C and E. The adverse effect would be related to the cost of the new Manhattan CBD toll and the reduction of VMT for taxis and FHVs, which would result in a decrease in revenues that could lead to losses in employment.

To address the potential disproportionately high and adverse effects on low-income drivers and taxi and FHV drivers, the Project Sponsors will implement the following mitigation measures, described in more detail earlier in this chapter:

- For low-income drivers:
 - Tax credit for tolls paid
 - Education/outreach/coordination on the tax credit
 - Elimination of the E-ZPass tag deposit fee

- Enhanced promotion of Existing E-ZPass Payment and Plan Options
 - Education/outreach on Transit Discounts
 - Establishment of an Environmental Justice Community Group
 - **Enhancement:** Prioritizing equity in improving bus service in New York City
- For New York City taxi and/or FHV drivers if a tolling scenario is implemented with tolls of more than once a day for their vehicles:
 - Toll Cost: The Project Sponsors commit to working with the appropriate city and state agencies so that when passengers are present, they pay the toll, rather than the taxi/FHV driver.
 - Potential Job Losses:
 - Institute an Employment Resource Coordination Program.
 - Implement a pilot program, subject to FTA approval, to increase eligibility of taxi and FHV drivers to use their vehicles to provide paratransit trips.

The Project would address the demonstrated need to reduce vehicle congestion in the Manhattan CBD, which would benefit all drivers traveling to and near the Manhattan CBD, especially those who value their travel-time savings more than the toll cost. The reduced congestion would produce other related benefits, including travel-time savings, improved travel-time reliability, reduced vehicle operating costs, improved safety for vehicles, pedestrians, and bicyclists, and improved air quality in the Manhattan CBD and regionwide.

Reductions in vehicle volumes and VMT in the Manhattan CBD and other locations within the regional study area would benefit those who continue to drive in the Manhattan CBD, including delivery vehicles and taxi and FHV drivers. Transit riders who use buses, including minority and low-income passengers, would benefit from the CBD Tolling Alternative through congestion reduction that would result in travel-time savings, improved travel-time reliability, and improved safety.

Reduced regional air pollution would provide an important benefit to all residents of the region, particularly for environmental justice populations who experience adverse health effects related to air pollution, such as asthma. Most environmental justice populations who live in the Manhattan CBD would experience lower localized pollutant emissions due to reduced traffic.

In addition, the CBD Tolling Alternative would establish a reliable, recurring local source of funding for MTA capital projects, which would allow MTA to reinvest in and improve its transportation network. Most people throughout the region use public transportation to travel to and from the Manhattan CBD. As discussed earlier, approximately 76 percent of the people who travel to the Manhattan CBD for work use public transportation and this percentage is higher for minority commuters (82 percent) and low-income commuters (79 percent). MTA's transportation network is critical for mobility in the region, and improvements to the network would allow it to absorb increasing transit ridership and further reduce vehicle congestion.

Table 17-14 summarizes the effects of the environmental justice analysis presented in this chapter.

Table 17-14. Summary of Effects of the CBD Tolling Alternative Related to Environmental Justice

TOPIC	SUMMARY OF EFFECTS	DATA SHOWN IN TABLE	TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	
			A	B	C	D	E	F	G			
Potential disproportionately high and adverse effects on low-income drivers	The increased cost to drivers with the new CBD toll would disproportionately affect low-income drivers to the Manhattan CBD who do not have an alternative transportation mode for reaching the Manhattan CBD.	Narrative	The increased cost to drivers with the new CBD toll would disproportionately affect low-income drivers to the Manhattan CBD in all tolling scenarios.							Yes	<p>Mitigation needed. The Project will include a tax credit for CBD tolls paid by residents of the Manhattan CBD whose New York adjusted gross income for the taxable year is less than \$60,000. TBTA will coordinate with the New York State Department of Taxation and Finance (NYS DTF) to ensure availability of documentation needed for drivers eligible for the New York State tax credit.</p> <p>TBTA will post information related to the tax credit on the Project website, with a link to the appropriate location on the NYS DTF website to guide eligible drivers to information on claiming the credit.</p> <p>TBTA will eliminate the \$10 refundable deposit currently required for E-ZPass customers who do not have a credit card linked to their account, and which is sometimes a barrier to access.</p> <p>TBTA will provide enhanced promotion of existing E-ZPass payment and plan options, including the ability for drivers to pay per trip (rather than a pre-load balance) and refill their accounts with cash at participating retail locations, and discount plans already in place, about which they may not be aware.</p> <p>TBTA will coordinate with MTA to provide outreach and education on eligibility for existing discounted transit fare products and programs, including those for individuals 65 years of age and older, those with disabilities, and those with low incomes, about which many may not be aware.</p> <p>The Project Sponsors commit to establishing an Environmental Justice Community Group that would meet on a bi-annual basis, with the first meeting six months after Project implementation, to share updated data and analysis and hear about potential concerns.</p>	
Potential disproportionately high and adverse effects on taxi and FHV drivers	A potential disproportionately high and adverse effect would occur to taxi and FHV drivers in New York City, who largely identify as minority populations, in tolling scenarios that toll their vehicles more than once a day. This would occur in unmodified Tolling Scenarios A, D, and G; for FHV drivers, it would also occur in Tolling Scenarios C and E. The adverse effect would be related to the cost of the new Manhattan CBD toll and the reduction of VMT for taxis and FHVs, which would result in a decrease in revenues that could lead to losses in employment.	Narrative Change in daily taxi/FHV VMT with passengers in the CBD relative to No Action Alternative: Scenarios included in EA Net change in daily taxi/FHV trips to CBD relative to scenarios included in EA: Additional analysis to assess effects of caps or exemptions	Potential adverse effect would occur in Tolling Scenarios A, D, and G, which would not have caps or exemptions for taxis and FHV drivers.	-21,498 (-6.6%)	+15,020 (+4.6%)	-11,371 (-3.5%)	-54,476 (-16.8%)	-25,621 (-7.9%)	+4,962 (+1.5%)	-27,757 (-8.6%)	Yes	<p>Mitigation needed for New York City taxi and/or FHV drivers if a tolling scenario is implemented with tolls of more than once per day for their vehicles. The Project Sponsors will work with the appropriate city and state agencies so that passengers pay the toll, rather than the driver.</p> <p>TBTA will work with MTA NYCT to institute an Employment Resource Coordination Program to connect drivers experiencing job insecurity with a direct pathway to licensing, training and job placement with MTA or its affiliated vendors at no cost to the drivers.</p> <p>For those who may not want a commercial driver's license, TBTA will coordinate with MTA NYCT to submit a request to the Federal Transit Administration for a pilot program that will help increase eligibility of taxi and FHV drivers to use their vehicles to provide paratransit trips.</p>

17.10 ENVIRONMENTAL JUSTICE PUBLIC ENGAGEMENT

Public engagement is a critical component of USDOT's and FHWA's policies and practices related to environmental justice. FHWA and the Project Sponsors conducted an extensive early public outreach program for the Project during preparation of this EA with a specific focus on coordinating with and obtaining feedback from environmental justice populations and representatives of environmental justice communities that could be affected by the Project. This section describes the extensive environmental justice public outreach program that FHWA and the Project Sponsors developed for the Project. See **Chapter 18, “Agency Coordination and Public Participation”** for additional details on outreach methods and general public involvement efforts for the Project.

FHWA and the Project Sponsors used comments and feedback provided during this early public outreach to inform the environmental justice analysis and overall preparation of this EA as described throughout this chapter. A summary of issues raised and how they were addressed in the environmental justice analysis is provided in **Section 17.4** of this chapter.

FHWA and the Project Sponsors began outreach for the Project to environmental justice populations in August 2021. Using preliminary data and analyses collected during development of this EA, the Project Sponsors identified social media and traditional media outlets that would reach a wide audience of minority and low-income populations in the 28-county regional study area. The Project Sponsors relied on contact information from MTA's Office of Diversity, NYCDOT, and Metropolitan Planning Organizations and Councils of Government that represent counties within the study area to begin a contact list and have updated that list as members of the public have expressed interest in the Project. The Project Sponsors used the contact list to circulate information about the Project and public meeting opportunities. In addition, FHWA and the Project Sponsors corresponded with Federally recognized and state recognized Native American tribes with current or historical presence within the regional study area to inform them about the Project and to offer an opportunity to meet with them to provide further information and discuss any concerns.

17.10.1 Environmental Justice Webinars

The Project Sponsors held webinars to engage with environmental justice populations throughout the regional study area. Promotional materials and the Project website (<https://new.mta.info/project/CBDTP>) described that the purpose of these meetings was to provide information to and get input from environmental justice populations. The Project Sponsors targeted sessions to the three states in the study area, Connecticut, New Jersey, and New York, but people were welcome to attend any session. Although advertised as environmental justice webinars, any member of the public could attend and speak at the sessions.

The Project Sponsors advertised the environmental justice webinars through social media, traditional media, signs and posters on public transportation and at stations, and announcements on the Project Sponsors' websites. As described in **Chapter 18, “Agency Coordination and Public Participation,”** the Project Sponsors advertised meetings on 33 media outlets including English and foreign language publications throughout the 28-county region. The meetings were also advertised on radio stations, and the Project

Sponsors conducted digital advertising through Geo Fencing, Twitter, and World Journal. Advertisements for the webinars were translated to Spanish, Chinese, Haitian Creole, Bengali, Korean, Italian, Portuguese, and Russian, which are the most prominent non-English languages used by residents of the regional study area.

The Project Sponsors hosted six environmental justice webinars in October 2021 (October 7, 12, 13, 26, 27, and 28) and three environmental justice webinars in December 2021 (December 7, 8, and 9, 2021). The meetings began at 6:00 p.m. **Table 17-15** lists the dates and times of each webinar and provides an overview of the participation at each webinar.

Table 17-15. Environmental Justice Webinars

MEETING	LOCATION	DATE	MEETING START TIME	MEETING END TIME	TOTAL UNIQUE ZOOM WEBINAR VIEWERS	TOTAL YOUTUBE LIVE VIEWERS	TOTAL ORAL COMMENTS	TOTAL Q&A
Webinar 1	New York	10/7/2021	6:00 p.m.	6:54 p.m.	31	14	11	20
Webinar 2	New Jersey	10/12/2021	6:00 p.m.	6:37 p.m.	10	13	4	27
Webinar 3	Connecticut	10/13/2021	6:00 p.m.	8:07 p.m.	12	12	3	17
Webinar 4	New York	10/26/2021	6:00 p.m.	8:09 p.m.	23	25	4	18
Webinar 5	New Jersey	10/27/2021	6:00 p.m.	8:08 p.m.	9	10	4	18
Webinar 6	Connecticut	10/28/2021	6:00 p.m.	8:11 p.m.	18	9	10	55
Webinar 7	New York	12/7/2021	6:00 p.m.	8:02 p.m.	32	15	6	20
Webinar 8	New Jersey	12/8/2021	6:00 p.m.	8:01 p.m.	7	10	1	13
Webinar 9	Connecticut	12/9/2021	6:00 p.m.	8:00 p.m.	3	8	0	9
TOTALS					145	116	43	197

The webinars were targeted to different geographic areas; however, the webinars were open to anyone who wished to participate regardless of where they lived or worked. Meeting attendees were able to participate via computer or telephone. Meeting attendees could sign up to speak for two minutes either in advance of or during the meeting. Attendees also had the opportunity to communicate via the Question-and-Answer function of the web platform. The webinars continued beyond the two-hour duration as necessary to accommodate all speakers.

American Sign Language interpretation and closed captioning were available at each webinar. Additional language interpretation in any language were made available upon advance request. Individuals who are hearing impaired could dial 711 to be connected free of charge with a communications assistant. To provide additional accessibility, the Project Sponsors live-streamed public webinars and posted recordings of all public presentations for on-demand viewing in multiple languages via YouTube.

The participation in the environmental justice webinars is shown in **Table 17-15** and described below. It should be noted that environmental justice populations also participated in the 10 public webinars held in September and October 2021. There were approximately 1,150 participants in these public webinars. As

part of these webinars, attendees could take an optional survey, which included questions about their demographic characteristics. Based on the results received, approximately one-third of meeting attendees identified as environmental justice populations. (Refer to **Chapter 18, “Agency Coordination and Public Participation,”** for more information about the public webinars.)

17.10.1.1 Environmental Justice Webinars 1 through 6

The Project Sponsors held Environmental Justice Webinars 1 through 6 in October 2021. The webinars introduced the participants to the Project, using the same presentation at each webinar. The webinars began with a live introduction and overview of attendees from the Project Sponsors. This was followed by a recorded presentation. The first half of the presentation was the same as for the early outreach public webinars (see **Chapter 18, “Agency Coordination and Public Participation”**). It provided an overview of the Project’s purpose, needs, and objectives; identified the two alternatives studied in detail in this EA (No Action Alternative and CBD Tolling Alternative); described the tolling scenarios and range of potential tolls; and identified the topics to be studied in the EA. The second half of the presentation focused specifically on the environmental justice analysis for this EA. It described the regulatory framework for this environmental justice analysis, the methodology for preparing the analysis, an overview of identified environmental justice populations in the regional study area; and a preliminary list of the Project’s potential benefits to and effects on environmental justice populations. The presentation also described the Environmental Justice Technical Advisory Group and the Environmental Justice Stakeholder Working Group, and the Project Sponsors explained how participants could sign up to participate in the Environmental Justice Stakeholder Working Group. The presentation concluded with the Project schedule, a description of future public engagement opportunities, and information on the Project website.

Following the presentation, the Project Sponsors moderated the oral testimony. Although the Project Sponsors gave speakers an opportunity to sign up in advance, anyone in attendance could speak. Comments and questions could be submitted via the Question-and-Answer function of the webinar as well. The Project Sponsors responded to questions sent via the Question-and-Answer function, providing factual and technical responses, along with logistical information. There were 36 speakers and 155 Question- and- Answer submissions during the October webinars. Each webinar was recorded, and the public could view the YouTube recording on the Project’s website at any time following the meeting. The oral and written comments were logged in the Project’s record.

17.10.1.2 Environmental Justice Webinars 7 through 9

The Project Sponsors hosted Environmental Justice Webinars 7 through 9 in December 2021. These webinars followed the same format as Environmental Justice Webinars 1 through 6 and included a live introduction followed by a recorded presentation. The presentation reviewed the purpose, need, and objectives for the Project and the approach to the environmental justice analysis. Then, the presentation identified the demographic characteristics of the regional study area and identified environmental justice populations. The presentation continued with a description of travel characteristics of environmental justice populations with a focus on travel to and from the Manhattan CBD. It followed with an overview of the tolling scenarios and travel demand forecasting, including preliminary results for changes in automobile

trips, transit ridership, and taxi/FHV trips. The presentation concluded with an overview of the MTA 2020–2024 Capital Program.

Following the presentation, the Project Sponsors moderated the oral testimony. Although the Project Sponsors gave speakers an opportunity to sign up in advance, anyone in attendance could speak. Comments and questions could also be submitted via the Question-and-Answer function of the webinar. The Project Sponsors responded to questions sent via the Question-and-Answer function, providing factual and technical responses, along with logistical information. There were 7 speakers and 42 Question-and-Answer function submissions during the December webinars. Each meeting was recorded, and the public could view the YouTube recording through the Project’s website at any time following the meeting. The oral and written comments were logged in the Project’s record.

17.10.2 Environmental Justice Technical Advisory Group

The Project Sponsors invited community leaders, advocacy groups, industry groups, and community members from the regional study area with expertise in environmental justice considerations to participate in an Environmental Justice Technical Advisory Group. The Project Sponsors invited 37 groups to participate in the Environmental Justice Technical Advisory Group. The following 16 groups accepted the invitation to participate:

- ALIGN
- Chhaya
- Community Voices Heard
- Connecticut Coalition for Environmental Justice
- El Puente
- Good Old Lower East Side (GOLES)
- Hispanic Federation
- NAACP Metropolitan Council Region
- National Action Network
- New Jersey Environmental Justice Alliance
- New York City Environmental Justice Alliance
- South Bronx Unite
- UPROSE
- Urban League of Greater Hartford
- WE ACT for Environmental Justice
- Youth Ministries for Peace and Justice (YMPJ)

Representatives of 14 groups participated in the first meeting of the Environmental Justice Technical Advisory Group, which was held on October 13, 2021, from 1:00 p.m. to 3:00 p.m. Following introductions by the Project Sponsors and the participants, the Project Sponsors presented Project information. Meeting participants were invited to interject with questions or comments during the presentation. The presentation included a Project overview (purpose and need, alternatives studied in this EA, the environmental topics covered in this EA, and schedule), identification of the potential benefits and effects of the Project on environmental justice populations, the process to assess potential effects on environmental justice populations, an overview of the race and income characteristics of the regional study area, the initial identification of environmental justice populations in the regional study area, and an overview of public engagement activities, including targeted outreach to environmental justice populations. A summary was prepared to document the meeting, including questions and comments raised by the participants and the responses provided by the Project Sponsors.

Following the meeting, the Project Sponsors prepared a summary of the topics raised by the meeting participants and topics for which additional information was requested. The Project Sponsors circulated the list of topics with the members of the Environmental Justice Technical Advisory Group and requested their input on the list as well as any additional topics or concerns that would like to discuss further. The Project Sponsors developed the materials for the second meeting of the Environmental Justice Technical Advisory Group based on these requests.

A second meeting of the Environmental Justice Technical Advisory Group was held on November 3, 2021, from 10:00 a.m. to 12:00 p.m., and representatives of 11 groups participated. The presentation provided more information on topics raised at the first meeting using the list of topics and input from members described above. The topics included modes of travel to the Manhattan CBD by environmental justice populations, demographic characteristics of Manhattan CBD residents, access to transit within the regional study area, an overview of the tolling scenarios, the process for travel demand forecasting, preliminary traffic analysis results, preliminary findings on indirect displacement and changes in air quality emissions, and an overview of the MTA 2020–2024 Capital Program. A summary was prepared to document the meeting, including questions and comments raised by the participants and the responses provided by the Project Sponsors.

The Project Sponsors held a third meeting of the Environmental Justice Technical Advisory Group on February 9, 2022, from 6:00 p.m. to 8:00 p.m. Representatives of seven groups attended. The presentation included additional information to respond to previous questions and concerns raised in the second meeting, including how the Project would change traffic volumes in environmental justice areas, changes in traffic at local intersections, potential effects on air quality, effects of the Project on bus ridership levels, and concerns related to the potential for indirect displacement because of the Project. A summary was prepared to document the meeting, including questions and comments raised by the participants and the responses provided by the Project Sponsors.

17.10.3 Environmental Justice Stakeholder Working Group

The Project Sponsors established an Environmental Justice Stakeholder Working Group. This group comprises interested members of the public with a focus on environmental justice concerns. The Project Sponsors provided information about the Environmental Justice Stakeholder Working Group during the initial, broad public outreach any person or group could request to join. People could suggest themselves or others as participants in this group. Members requested participation in the Environmental Justice Stakeholder Working Group using a form on the Project website or by contacting the Project Sponsors using the telephone hotline.

When expressing interest in the Environmental Justice Stakeholder Working Group, interested members of the public provided information about the purpose of their participation and their expertise or interest in environmental justice considerations. Some people expressed an interest in the study itself or on topics that are more general than or not germane to environmental justice considerations. Twenty-seven people expressed interest in participating in the Environmental Justice Stakeholder Working Group, and the Project Sponsors invited these 27 people to each meeting. Some of these people represented particular interest

groups or industries, including people representing bus advocacy groups or bus companies and people representing motorcycle riders.

The first meeting of the Environmental Justice Stakeholder Working Group was held on November 9, 2021, from 6:00 p.m. to 8:05 p.m. Nineteen of the 27 members participated in the meeting. Following introductions by the Project Sponsors and the participants, the Project Sponsors presented Project information. Participants were invited to interject with questions or comments during the presentation. The presentation included the Project overview (purpose and need, alternatives studied in detail in this EA, the environmental topics covered in this EA, and schedule), the regulatory framework on environmental justice and the process to assess potential effects on environmental justice populations, the definitions of minority and low-income populations and charts and maps showing the identification of environmental justice populations in the regional study area, preliminary results on the Project's potential effects on traffic and the taxi/FHV industry, an overview of comments received during the early public outreach for this EA, and potential topics of discussion for the group. A summary was prepared to document the meeting, including questions and comments raised by the participants and the responses provided by the Project Sponsors.

Following the meeting, the Project Sponsors prepared a summary of the topics raised by the meeting participants and topics for which additional information was requested. The Project Sponsors circulated the list of topics with the members of the Environmental Justice Stakeholder Working Group and requested their input on the list as well as any additional topics or concerns that they would like to discuss further. The Project Sponsors developed the materials for the second meeting of the Environmental Justice Stakeholder Working Group based on these requests.

A second meeting was held on November 30, 2021, from 6:00 p.m. to 8:15 p.m., and 19 of the 27 members participated. The presentation provided more information on topics raised at the first meeting based on the list of topics and member input described above. The topics included information on the race of residents of the regional study area, a more detailed description of the travel demand modeling process, predicted changes in vehicular and transit trips with the CBD Tolling Alternative (including patterns of travel by low-income individuals), preliminary results of the traffic analysis (including potential effects in the South Bronx and the Lower East Side), and changes in transit ridership by mode and at regional transit hubs. A summary was prepared to document the meeting, including questions and comments raised by the participants and the responses provided by the Project Sponsors.

17.10.4 Future Outreach to Environmental Justice Populations

During the public review of this EA, FHWA and the Project Sponsors will hold additional meetings with the Environmental Justice Technical Advisory Group and Environmental Justice Stakeholder Working Group. They will also hold additional environmental justice webinars.

In addition, the Project Sponsors will conduct outreach targeted to taxi and FHV drivers. Working with the TLC, the Project Sponsors will distribute information to TLC's industry-wide email distribution list of nearly 200,000 industry contacts. This list includes nearly 175,000 drivers and thousands of other industry contacts working for yellow taxi, green cab, livery, and black car owners; FHV companies; luxury limousine

companies; commuter van companies; paratransit drivers; medallion brokers; leasing agents; and base owners.

FHWA and the Project Sponsors will consider comments raised about environmental justice considerations and will address the comments as part of FHWA's NEPA decision document.

Following completion of the NEPA process, so that ongoing concerns related to environmental justice can be addressed, the Project Sponsors will establish an Environmental Justice Community Group that will meet on a bi-annual basis, with the first meeting six months after implementation of the Project, to share updated data and analysis and hear about potential concerns.