

## 5. Social Conditions

This chapter provides an overview of social conditions for the New York City region, the Manhattan CBD, and the neighborhoods where implementation of the CBD Tolling Alternative would have potential environmental consequences related to population characteristics and community cohesion, neighborhood character, and current public policy. This chapter relies on data from **Chapter 4, “Transportation,”** to evaluate the effects of predicted changes in travel behavior resulting from the CBD Tolling Alternative on social conditions.

To present the wide range of topics related to social conditions, the chapter is broken into three subchapters:

- Subchapter 5A, “Social Conditions: Population Characteristics and Community Cohesion”
- Subchapter 5B, “Social Conditions: Neighborhood Character”
- Subchapter 5C, “Social Conditions: Public Policy”

This and other chapters of this EA (in particular **Chapters 2, 3, 6, 15, 17, and Subchapters 4A, 4B, 4C, 4E, 5B, and 5C**) collectively provide information relevant to FHWA’s guidance for a Community Impact Assessment.<sup>1</sup> The information is presented in this EA rather than in a stand-alone Community Impact Assessment report, and **Appendix 5A, “Social Conditions: Community Impact Assessment Summary Matrix,”** presents a matrix showing the elements of a Community Impact Assessment and where they can be found in this EA.

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<sup>1</sup> FHWA. 2018 Update. FHWA-PD-96-036. *Community Impact Assessment: A Quick Reference for Transportation*. [www.fhwa.dot.gov/livability/cia/quick\\_reference/ciaguide\\_053118.pdf](http://www.fhwa.dot.gov/livability/cia/quick_reference/ciaguide_053118.pdf).



## 5A. Population Characteristics and Community Cohesion

### 5A.1 INTRODUCTION

This subchapter assesses whether changes to population characteristics or travel patterns resulting from implementation of the CBD Tolling Alternative would affect community cohesion, community facilities and services, and access to employment. It also evaluates the effects of the CBD Tolling Alternative on certain vulnerable social groups, including elderly populations, persons with disabilities, transit-dependent populations, and nondriver populations. **Chapter 17, “Environmental Justice,”** presents an evaluation of the Project’s effects on low-income and minority populations and an analysis of whether the Project would result in disproportionately high and adverse effects on minority and low-income populations in accordance with Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.”

### 5A.2 METHODOLOGY

#### 5A.2.1 *Analysis Framework*

FHWA’s Technical Advisory T6640.8A provides guidance on the content of environmental documents prepared pursuant to NEPA and FHWA’s procedures that implement NEPA.<sup>2</sup> In addition, FHWA’s *Community Impact Assessment: A Quick Reference for Transportation* (Community Impact Assessment guidance) provides information on how to conduct a Community Impact Assessment and guidance on analyzing community impacts for transportation actions.<sup>3</sup> The Project Sponsors followed the guidance in these documents in preparing the analysis in this chapter. FHWA’s Technical Advisory T6640.8A identifies categories of resources that project sponsors should consider when assessing the environmental consequences of their undertakings, and the Community Impact Assessment guidance identifies types of community impacts to consider.

Consistent with FHWA Technical Advisory T6640.8A and the FHWA Community Impact Assessment guidance, this subchapter provides an overview of key population characteristics in the New York City region and evaluates potential effects on community cohesion, community facilities and services, certain social groups, and access to employment.

Community cohesion is the degree to which groups of people with shared attributes or affinities—such as cultural, religious, artistic, or activity-based communities—can form and maintain communities that are not limited to any particular location or neighborhood. Community cohesion is usually expressed as a “sense of belonging” or a level of commitment to a community, or a strong attachment to neighbors,

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<sup>2</sup> FHWA. October 30, 1987. FHWA Technical Advisory T6640.8A, “Guidance for Preparing and Processing Environmental and Section 4(f) Documents.” [www.environment.fhwa.dot.gov/legislation/nepa/guidance\\_preparing\\_env\\_documents.aspx#aa](http://www.environment.fhwa.dot.gov/legislation/nepa/guidance_preparing_env_documents.aspx#aa).

<sup>3</sup> FHWA. 2018 Update. FHWA-PD-96-036. *Community Impact Assessment: A Quick Reference for Transportation*. [www.fhwa.dot.gov/livability/cia/quick\\_reference/ciaguide\\_053118.pdf](http://www.fhwa.dot.gov/livability/cia/quick_reference/ciaguide_053118.pdf).

groups, and institutions, usually because of continued appreciation over time. FHWA Technical Advisory T66040.8A defines potential effects on community cohesion as, “[c]hanges in the neighborhoods or community cohesion for the various social groups as a result of the proposed action. These changes may be beneficial or adverse, and may include splitting neighborhoods, isolating a portion of a neighborhood or an ethnic group, generating new development, changing property values, or separating residents from community facilities, etc.”<sup>4</sup> In addition, the FHWA Community Impact Assessment guidance identifies types of community impacts, including displacement of residents and adverse effects on public facilities. As such, this subchapter also considers Project effects related to the potential for residential displacement and effects on community facilities and services—such as public or publicly funded schools, libraries, childcare centers, health care facilities, and fire and police protection.

Consistent with FHWA Technical Advisory T66040.8A, this subchapter also addresses potential effects on certain social groups, such as elderly populations, persons with disabilities, transit-dependent populations (those who use transit as their primary mode for some or all trips, irrespective of vehicle ownership), and nondriver populations. Changes in travel patterns and accessibility can affect these population sub-groups as they may rely on certain modes of transportation or certain accessibility patterns.

### **5A.2.2 Study Area**

The analysis of social conditions in this subchapter considers potential effects of the No Action Alternative and CBD Tolling Alternative on the 28-county region and the Manhattan CBD. The 28-county regional study is shown in **Figure 5A-1** and described in **Chapter 3, “Environmental Analysis Framework.”** It includes New York City and the surrounding region, which represents the primary catchment area for trips to and from the Manhattan CBD.

### **5A.2.3 Data Sources**

Unless otherwise noted, information on population characteristics is based on the U.S. Census Bureau’s 2015–2019 American Community Survey (ACS) 5-Year Estimates. The evaluation of the Project’s effects on these population characteristics is based on the results of comprehensive regional transportation modeling conducted for the Project as described in **Subchapter 4A, “Transportation: Regional Transportation Effects and Modeling.”**

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<sup>4</sup> FHWA. October 30, 1987. FHWA Technical Advisory T6640.8A, “Guidance for Preparing and Processing Environmental and Section 4(f) Documents.” [www.environment.fhwa.dot.gov/legislation/nepa/guidance\\_preparing\\_env\\_documents.aspx#aa](http://www.environment.fhwa.dot.gov/legislation/nepa/guidance_preparing_env_documents.aspx#aa).

## 5A.3 AFFECTED ENVIRONMENT

### 5A.3.1 *Regional Context*

The New York City metropolitan region is a very large and diverse area of some 12,500 square miles and a regional population of about 22.2 million residents. New York City is the center of the regional study area, which includes portions of three states—New York, New Jersey, and Connecticut—and is home to approximately 22.2 million residents according to the 2015–2019 ACS. **Figure 5A-1** shows the regional study area, with the five counties of New York City at the center, two counties to the east on Long Island, seven counties to the north of New York City in New York and Connecticut, and 14 counties to the west and south in New Jersey. The study area extends approximately 170 miles from east to west and approximately 175 miles from north to south. The region reflects a high level of social and economic diversity and its development patterns range from dense urban core areas in and around New York City to lower density suburban communities and low-density exurban areas.

The regional study area has a wide range of population densities, land uses, and development densities reflecting the long history of settlement patterns, the regional transportation network, and the location of the region's cities, communities, and neighborhoods. Other than large tracts of open space or lands owned by the State or Federal government, there are no unincorporated areas and there are more than 700 incorporated municipalities (boroughs, villages, towns, and cities) within the 28 counties of the regional study area. These incorporated municipalities range from small boroughs and villages—often with fewer than 5,000 residents, larger townships and towns, subregional urban areas, and cities. Large or small, these communities generally provide for essential community facilities and services and maintain their own planning, zoning, and development controls that define the character of the community. New York City is the urban center with its 8.4 million residents and, after New York City, the next largest city in the region is Newark in Essex County, New Jersey, with a population of approximately 281,000, followed by Jersey City in Hudson County, New Jersey, and Yonkers in Westchester County, New York, with populations of 262,000 and 200,000, respectively.

New York City is the most densely populated city in the United States.<sup>5</sup> As shown in **Figure 5A-2**, four of its five boroughs (counties)—the Bronx, Brooklyn, Manhattan, and Queens—are densely populated; in addition, the adjacent county across the Hudson River in New Jersey, Hudson County, is also densely populated. Other counties in the regional study area are more suburban in character, and density decreases at greater distance from New York City. New York City's population of 8.4 million people is approximately 38 percent of the regional population and yet its combined land area of 423 square miles represents only about 3.4 percent of the total land area of the region. The 28-county region is a mature metropolitan region with a long history of development patterns that are reflected in its transportation network and its population distribution.

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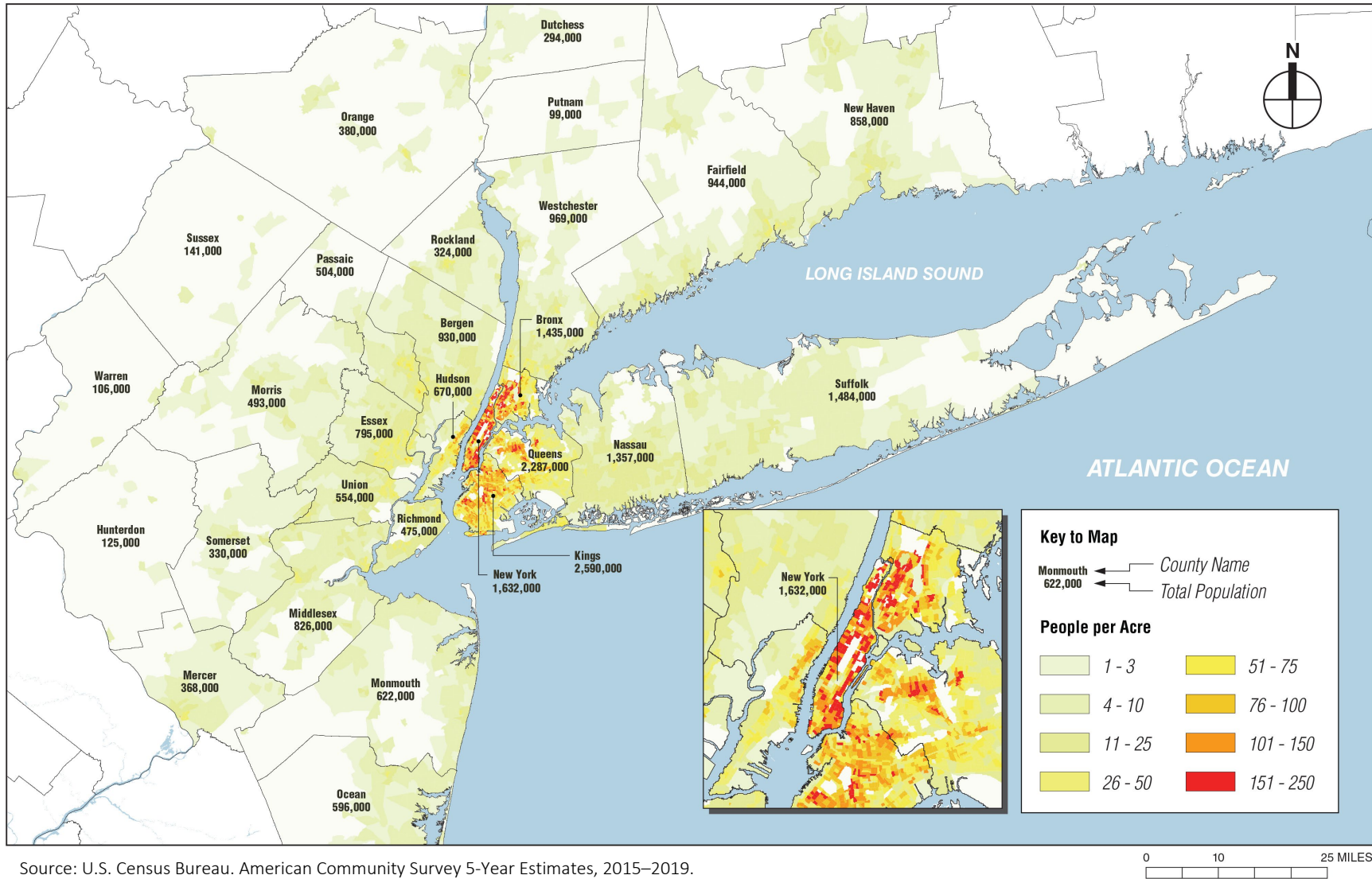
<sup>5</sup> New York City Department of City Planning. [www1.nyc.gov/site/planning/planning-level/nyc-population/newest-new-yorkers-2013.page](http://www1.nyc.gov/site/planning/planning-level/nyc-population/newest-new-yorkers-2013.page).

Figure 5A-1. Regional Study Area



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

Figure 5A-2. Population and Density



Source: U.S. Census Bureau. American Community Survey 5-Year Estimates, 2015–2019.

The region has a dense transportation network of highways and public transportation, including commuter rail, subway, light rail, buses, and ferries. Because New York City, and particularly Manhattan, has long been the economic center of the region, the transportation network is predominantly oriented to providing connections to and from Manhattan and New York City overall. Transportation links to Manhattan include the roads and highways that lead to and from the tunnels and bridges linking Manhattan to the region. The historic transportation patterns are most notable in the legacy infrastructure of fixed transportation routes (railroads, subways, and ferries) that connect the region to the city, and all five boroughs of New York City to the Manhattan CBD. The level of density in the urban core is reflected in the extensive transit network, frequent service throughout the region, and 24-hour service on the New York City subway and bus system. As depicted on **Figure 5A-3**, nearly all areas of New York City are within a half-mile of subway, commuter rail, Select Bus Service (SBS), or express bus service. One-half mile represents an approximately 10-minute walk for an average pedestrian, and therefore indicates the availability of these transportation services. In addition, New York City has a very dense local bus network, and all areas of the city are within a half-mile of a local bus stop other than one neighborhood in Queens (Breezy Point, a gated community in southern Queens). As discussed in **Section 5A.3.4**, most people use public transportation to travel to and from the Manhattan CBD.

Farther from New York City, the suburban and exurban areas of the regional study area have commuter rail and bus service that lead to New York City, with towns centered around commuter rail stations, but also include a more decentralized road network serving the greater region that developed as the region grew with a more auto-oriented development pattern. The highway network includes roads that do not connect to New York City at all as well as circumferential highways such as I-95, I-287, and I-84 that pass through New York City but largely bypass the Manhattan CBD. The expansion of the larger and decentralized highway network but the limited roadway capacity of the historic links to, from, and within Manhattan is reflected in the chronic congestion in Manhattan as described in **Chapter 1, "Introduction."**

At the hub of the regional study area, the Manhattan CBD is the traditional economic center of the region. It extends almost 5 miles from the tip of Lower Manhattan on the south to 60th Street on the north, and approximately 2 miles from the Hudson River on the west to the East River on the east. The Manhattan CBD includes the densely developed commercial areas of Lower Manhattan and Midtown Manhattan as well as residential neighborhoods within and around these business-oriented areas. **Subchapter 5B, "Social Conditions: Neighborhood Character,"** provides more detailed discussion of the neighborhoods and geographic areas of the Manhattan CBD.

Other areas of New York City are connected to the Manhattan CBD through the city's extensive transit system, which carries 85 percent of daily commuter trips to and from the Manhattan CBD, as well as by bridges and tunnels connecting the road and highway network to Manhattan. One of the city's five boroughs, Staten Island, is more geographically isolated from the rest of New York City, and is connected by highway bridges to Brooklyn and New Jersey (which carry express buses between Staten Island and Manhattan) and is linked to Manhattan by the iconic Staten Island Ferry. Staten Island is more suburban in character than other parts of New York City with less racial and ethnic diversity than the rest of New York City, and a housing stock with lower density.



Figure 5A-3. New York City Areas Within and Beyond One-Half Mile of Rail Stations, Subway Stations, or Express Bus and Select Bus Service Stops



Source: U.S. Census Bureau. Census Transportation Planning Package (CTPP), 2012–2016 Estimate.

### 5A.3.2 Community Cohesion

Community cohesion is the degree to which groups of people with shared attributes or affinities—such as cultural, religious, artistic, or activity-based communities—can form and maintain communities that are not limited to any particular location or neighborhood. Community cohesion and civic life in the regional study area are organized around neighborhoods and communities, including the 700 communities that surround New York City and the hundreds of neighborhoods within New York City that reflect the diversity of the city’s population. The regional study area has a wide range of geographic, cultural, religious, artistic, and activity-based communities spread throughout the region, with varying levels of economic, social, and cultural ties to the Manhattan CBD. As distances increase from the Manhattan CBD, fewer residents have direct and daily interactions with the Manhattan CBD, as evidenced by the smaller numbers and proportions of daily commuters to the Manhattan CBD (discussed in **Section 5A.3.4**).

The region’s transportation network, including its roadways, sidewalks, and public transportation services, is essential to connecting the communities that define the region, allowing the mobility to access its urban centers, centers of government, cultural institutions, and, most importantly, places of employment. This is particularly true for the Manhattan CBD, which has large share of the region’s jobs. As described in more detail in **Chapter 6, “Economic Conditions,”** a meaningful connection to the Manhattan CBD for many people is that it is their place of work. The scale of the social connections in the region and the transportation demands to maintain those connections are immense. According to the 2010/2011 Regional Household Travel Survey, there are approximately 80 million individual trips in the region on an average weekday. Approximately one-third of all daily trips are made for social/recreational purposes, shopping, or school, and approximately one-quarter of all daily trips are for work purposes.<sup>6</sup>

There are thousands of places of worship for many different religions throughout the region, and these remain important local neighborhood anchors not particularly tied to or dependent on regional mobility. In and around the Manhattan CBD, there are similarly dispersed neighborhood places of worship as well as important regional institutions that draw local and regional visitors as well as tourists and visitors from outside the region. Some notable examples include St. Patrick’s Cathedral, Trinity Church, Central Synagogue, Othman bin Affan Masjid (Islamic Society of Mid Manhattan), St. Vartan Armenian Cathedral, the Mahayana Buddhist Temple, and many others.<sup>7</sup> In total, the Manhattan CBD has approximately 200 places of worship.<sup>8</sup> Places of worship typically are accessible by transit, and most do not have on-site visitor parking given the densely developed nature of the Manhattan CBD, which indicates that travel by vehicle is not the predominant mode of transportation for their worshippers.

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<sup>6</sup> Trip purpose categories included “Work,” “School,” “Social/Recreational,” “Shopping,” and “Other;” more detailed options comprising “Other” included “Personal Business,” “Home to Serving Passengers/Serving Passengers to Home,” and “Other.” New York Metropolitan Transportation Council and New Jersey Transportation Planning Authority. October 2014. 2010/2011 Regional Household Travel Survey. [www.nymtc.org/portals/0/pdf/RHTS/RHTS\\_FinalExecSummary10.6.2014.pdf](http://www.nymtc.org/portals/0/pdf/RHTS/RHTS_FinalExecSummary10.6.2014.pdf).

<sup>7</sup> The U.S. Census Bureau does not collect data on religious affiliation in its demographic surveys or decennial census; therefore, data on the population of different religious affiliations in the Manhattan CBD is not available from the census.

<sup>8</sup> Based on a review of ArcGIS Online, <https://www.arcgis.com/index.html>, in combination with [Google maps.no.com](https://www.google.com/maps).

### **5A.3.3 Community Facilities and Services**

Community facilities include schools, libraries, childcare centers, health care facilities, and police and fire protection. Throughout the region, most community facilities are locally focused, serving their individual communities, although some have a larger regional draw. Other facilities, such as homeless shelters, food pantries and meal distribution services, jails, community centers, colleges and universities, and religious and cultural facilities, are also community facilities and services and these serve a broader regional need.

#### **5A.3.3.1 LIBRARIES**

There are some 200 branch libraries in New York City and hundreds more in individual communities in the region. The region includes some major, central libraries, such as the main library of the New York Public Library system within the Manhattan CBD and the main library of the Brooklyn Public Library system outside the Manhattan CBD, as well as many smaller libraries throughout the region. The regional libraries, like other large cultural institutions with a regional draw, attract visitors with specific needs (i.e., research projects or other specialized tasks).

#### **5A.3.3.2 SCHOOLS**

Similarly, schools are decentralized and located throughout the city and region, serving their local communities. In New York City, the New York City Department of Education (NYCDOE) provides transportation to all eligible New York City students in public, charter, and non-public schools. NYCDOE transportation services vary by school and each child's eligibility for those services. In general, NYCDOE provides student MetroCards for students living more than one-half mile from their school, and may provide yellow school bus service, depending on the age of the student, distance to school, and the student's disability status.<sup>9</sup> Many students, especially those in Manhattan where school catchment zones are small given the population density, walk or take transit to school.

The Manhattan CBD includes approximately 125 public schools serving some 60,000 students, as well as charter schools and private and parochial schools. Based on recent surveys conducted by the NYCDOE, approximately 8 percent of the public school students who live within the Manhattan CBD use school buses to get to school; the rest use public transit, walk, or bicycle to school.

#### **5A.3.3.3 MEDICAL FACILITIES**

Like other services in a community, health clinics, urgent care, doctors' offices, and community hospitals are present throughout the regional study area and typically serve their local communities. The 28-county study area also has healthcare facilities, including specialists and hospitals, with a larger, regional (and, in some cases, national and international) draw because of the specialty services they provide. Some of these are within the Manhattan CBD and others are outside. For example, specialty hospitals and associated doctors' offices are located throughout Manhattan, including within the Manhattan CBD on the east side

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<sup>9</sup> MetroCard is the primary payment method for the New York City subway and New York City and MTA buses. Student MetroCards 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.

between East 14th and East 34th Street and outside the Manhattan CBD on the Upper East Side (generally between East 68th and East 106th Streets).

Some people may travel by vehicle from locations outside the Manhattan CBD or by vehicle within the Manhattan CBD to access these facilities. In addition, some residents of the Manhattan CBD may travel by vehicle to access medical facilities outside the Manhattan CBD.

The rate of vehicle use to access medical facilities depends in part on the facilities' distance to a subway station or bus route (as well as other factors, including the patient's mobility and the type of medical service sought). For medical office uses within one-quarter mile of a subway station, approximately 6 percent of trips to these uses are by auto or taxi/FHV modes, according to data from NYCDOT's mode choice surveys. For medical office uses that are beyond one-quarter mile from a subway station, approximately 14 percent of trips are by auto or taxi/FHV modes. Therefore, most medical trips, even those to facilities more than one-quarter mile from a subway station, are made by modes other than auto or taxi/FHV. Several major medical facilities in Manhattan are more than one-quarter mile from a subway station, including New York University Langone Medical Center, the Veterans' Administration New York Harbor Healthcare System, and Bellevue Hospital Center in the Manhattan CBD.

#### **5A.3.3.4 OTHER FACILITIES**

Other facilities, such as homeless shelters, food pantries and meal distribution services, jails, community centers, colleges and universities, and religious and cultural facilities, are also community facilities and services. These serve both a local and a broader regional need.

#### **5A.3.4 *Population Characteristics and Protected Social Groups***

This section summarizes key population characteristics in the regional study area and identifies social groups that are the focus of this analysis: elderly populations, persons with disabilities, transit-dependent populations (those who use transit as their primary mode for some or all trips, irrespective of vehicle ownership), and nondriver populations.

The 28-county regional study area has approximately 22.2 million residents. As shown in **Figure 5A-2** and detailed in **Table 5A-1**, approximately 38 percent of these residents live in New York City; and almost 20 percent in the four closest New Jersey counties (Bergen, Essex, Hudson, and Union) and Nassau County, just east of New York City.

The population of the regional study area has grown by 5 percent since 2000, with New York City adding more than 410,000 people and accounting for 37 percent of that growth. Brooklyn saw the largest population gain in the region, with almost 126,000, followed by the Bronx (102,000), and Manhattan (95,000). Population projections prepared by the New York Metropolitan Transportation Council (NYMTC), the regional Metropolitan Planning Organization (MPO) for the New York City region, projects continued

growth in the region, with the population projected to exceed 25 million by 2045. New York City's population is projected to surpass 9 million by 2045.<sup>10</sup>

**Table 5A-1. Population Characteristics of the Regional Study Area**

GEOGRAPHIC AREAS	TOTAL POPULATION	% MINORITY	% LOW-INCOME	% AGE 65 AND OLDER	% WITH AMBULATORY DIFFICULTY	% HOUSEHOLDS WITH NO ACCESS TO A VEHICLE
<b>New York City</b>	<b>8,419,316</b>	<b>67.9%</b>	<b>36.0%</b>	<b>14.5%</b>	<b>7.0%</b>	<b>54.6%</b>
Bronx County	1,435,068	90.9%	51.0%	12.5%	9.5%	59.1%
Kings County (Brooklyn)	2,589,974	63.6%	39.1%	13.6%	7.0%	55.8%
New York County (Manhattan)	1,631,993	53.1%	28.9%	16.2%	6.5%	77.0%
Queens County	2,287,388	75.0%	31.0%	15.3%	6.2%	36.7%
Richmond County (Staten Island)	474,893	39.0%	23.0%	16.0%	6.2%	16.7%
<b>Long Island Counties</b>	<b>2,840,341</b>	<b>36.1%</b>	<b>15.6%</b>	<b>17.0%</b>	<b>5.1%</b>	<b>6.0%</b>
Nassau County	1,356,509	40.0%	14.5%	17.5%	4.7%	6.9%
Suffolk County	1,483,832	32.4%	16.7%	16.5%	5.2%	5.2%
<b>New York Counties North of New York City</b>	<b>2,065,938</b>	<b>39.3%</b>	<b>22.3%</b>	<b>16.0%</b>	<b>5.7%</b>	<b>11.7%</b>
Dutchess County	293,754	28.5%	21.4%	17.1%	6.7%	7.8%
Orange County	380,085	35.8%	25.8%	13.7%	6.7%	9.8%
Putnam County	98,787	21.3%	12.7%	16.8%	5.4%	4.9%
Rockland County	324,422	36.9%	28.3%	15.6%	4.8%	10.7%
Westchester County	968,890	46.5%	20.2%	16.7%	5.3%	14.5%
<b>New Jersey Counties</b>	<b>7,060,811</b>	<b>46.8%</b>	<b>22.5%</b>	<b>15.7%</b>	<b>5.5%</b>	<b>12.3%</b>
Bergen County	930,390	43.4%	16.1%	17.0%	4.6%	8.3%
Essex County	795,404	69.5%	33.3%	13.5%	6.5%	22.4%
Hudson County	670,046	71.2%	32.8%	11.8%	5.8%	32.6%
Hunterdon County	124,823	14.5%	10.7%	17.9%	3.7%	3.4%
Mercer County	367,922	50.3%	25.0%	15.0%	5.5%	11.2%
Middlesex County	825,920	56.9%	19.4%	14.7%	5.4%	8.0%
Monmouth County	621,659	24.8%	16.3%	17.2%	5.9%	6.9%
Morris County	493,379	28.6%	12.4%	16.8%	4.5%	4.7%
Ocean County	596,415	15.3%	24.8%	22.5%	7.6%	6.3%
Passaic County	503,637	58.7%	32.8%	14.3%	5.1%	16.6%
Somerset County	329,838	43.7%	12.1%	15.3%	4.1%	4.9%
Sussex County	141,483	13.7%	13.6%	16.7%	5.7%	3.5%
Union County	554,033	60.5%	24.8%	14.2%	5.1%	11.8%
Warren County	105,862	18.3%	19.1%	17.6%	6.9%	6.4%
<b>Connecticut Counties</b>	<b>1,801,439</b>	<b>37.7%</b>	<b>23.1%</b>	<b>16.2%</b>	<b>5.5%</b>	<b>9.6%</b>
Fairfield County	943,926	38.3%	20.8%	15.6%	5.1%	7.8%
New Haven County	857,513	37.1%	25.6%	17.0%	6.2%	11.6%
<b>TOTAL</b>	<b>22,187,845</b>	<b>52.0%</b>	<b>26.8%</b>	<b>15.4%</b>	<b>6.0%</b>	<b>27.9%</b>

Source: U.S. Census Bureau, American Community Survey (ACS) 2015–2019 5-Year Estimates.

Note: Low-income residents are those with household incomes of up to 1.99 times the Federal poverty level.

<sup>10</sup> New York Metropolitan Transportation Council. 2015. 2050 Socioeconomic and Demographic Forecasts. [www.nymtc.org/DATA-AND-MODELING/SED-Forecasts/2050-Forecasts](http://www.nymtc.org/DATA-AND-MODELING/SED-Forecasts/2050-Forecasts).

According to the U.S. Census Bureau 2015–2019 ACS 5-Year Estimates, 52 percent of the regional study area’s population is minority. Some 67.9 percent of New York City’s population identifies as minority and 53.7 percent of the combined residents of the four closest New Jersey counties (Bergen, Essex, Hudson, and Union) and Nassau County are minority. An estimated 26.8 percent of the population in the regional study area have a household income that can be considered low-income.<sup>11</sup> In New York City as a whole, approximately 36.0 percent of the population is low-income and 22.4 percent of the combined population in the four closest New Jersey counties and Nassau County is low-income. Overall, in the New York counties north of New York City, Long Island, and the portions of New Jersey and Connecticut outside of New York City that comprise the remainder of the regional study area, the proportion of minority residents ranges from 13.7 percent to 69.5 percent, with the lowest numbers in the less densely populated New Jersey counties farthest from New York City. Approximately 10.7 percent to 33.3 percent of the population of the counties outside New York City is low-income. **Appendix 5B, “Social Conditions: Supplemental Demographic Information for the Regional Study Area and Manhattan CBD,”** and **Chapter 17, “Environmental Justice,”** provide additional demographic information regarding minority status and income characteristics for the Manhattan CBD and regional study area, respectively.

In the regional study area, approximately 10 percent of the noninstitutionalized population has a disability and approximately 6 percent of the noninstitutionalized population age 5 and older is disabled with ambulatory difficulty.<sup>12</sup> The counties with the highest percentages of population with ambulatory difficulty are Bronx County at 9.5 percent (compared to 6.4 percent in New York State overall) and Ocean County at 7.6 percent (compared to 5.5 percent in New Jersey overall).

About 15 percent of the population in the regional study area is 65 years old or older, representing a 29 percent increase in this age group since the year 2000. Throughout the regional study area, approximately 12 percent to 23 percent of each county’s population is 65 years or older; Ocean County, New Jersey, has the highest percentage of elderly residents at 23 percent. Across the regional study area, approximately 22 percent of the population is youth (age 0 to 17) and approximately 63 percent is working age (age 18 to 64).

Roughly 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 5A-1** and **Figure 5A-4**.<sup>13</sup> As would be expected given the urban densities of New York City, the proportion of households that do not have access to a vehicle is substantially higher in Manhattan (77 percent in the county as a whole, 80 percent in the Manhattan CBD),

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<sup>11</sup> As described in **Chapter 17, “Environmental Justice,”** low-income residents are those with household incomes of up to 1.99 times the Federal poverty level.

<sup>12</sup> This census category is defined as “having serious difficulty walking or climbing stairs.” This community may depend on vehicular transportation and would have challenges switching to public transit.

<sup>13</sup> This discussion relies on data on “Vehicles Available” from the 2015-2019 ACS. These data show the number of passenger cars, vans, and pickup or panel trucks of one-ton (2,000 pounds) capacity or less kept at home and available for the use of household members. Vehicles rented or leased for one month or more, company vehicles, and police and government vehicles are included if kept at home and used for nonbusiness purposes. Motorcycles or other recreational vehicles are excluded. Dismantled or immobile vehicles are excluded. Vehicles kept at home but used only for business purposes also are excluded.

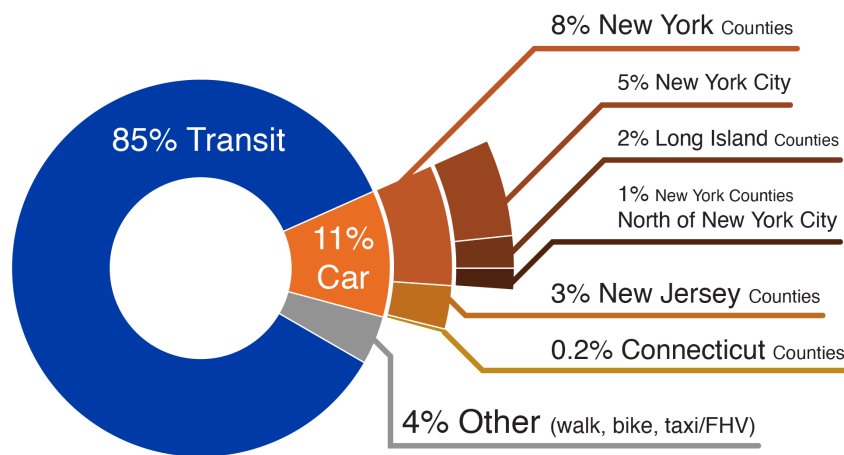
the Bronx (59 percent), and Brooklyn (56 percent), than in the region (28 percent). These households without access to a vehicle are part of the region’s transit-dependent population. Vehicle access generally increases with income,<sup>14</sup> resulting in a greater number of all auto trips being made by those reporting a higher income than by households that reported a lower income.<sup>15</sup>

As shown in **Figure 5A-5** (on the following page), the percentage of households with no access to a vehicle generally decreases with distance from the Manhattan CBD. While some counties just outside New York City have vehicle access rates similar to those of New York City counties, these adjacent counties typically have a much lower share of commuters to the Manhattan CBD. For example, Hudson County in New Jersey has an auto ownership rate similar to that of Queens, but it contributes only 5 percent of the commuters to the Manhattan CBD, compared to 17 percent from Queens.

### 5A.3.5 Access to Employment in the Manhattan CBD

Chapter 1, “Introduction,” describes the commuting behaviors of workers commuting to the Manhattan CBD, both by mode and by county of origin (**Figure 5A-4**). Given that the Project would directly affect the use of driving modes to access employment in the Manhattan CBD, this section provides more detail about existing travel mode choices for people who travel to

**Figure 5A-4. Work Trips Entering Manhattan CBD (by mode and origin)**



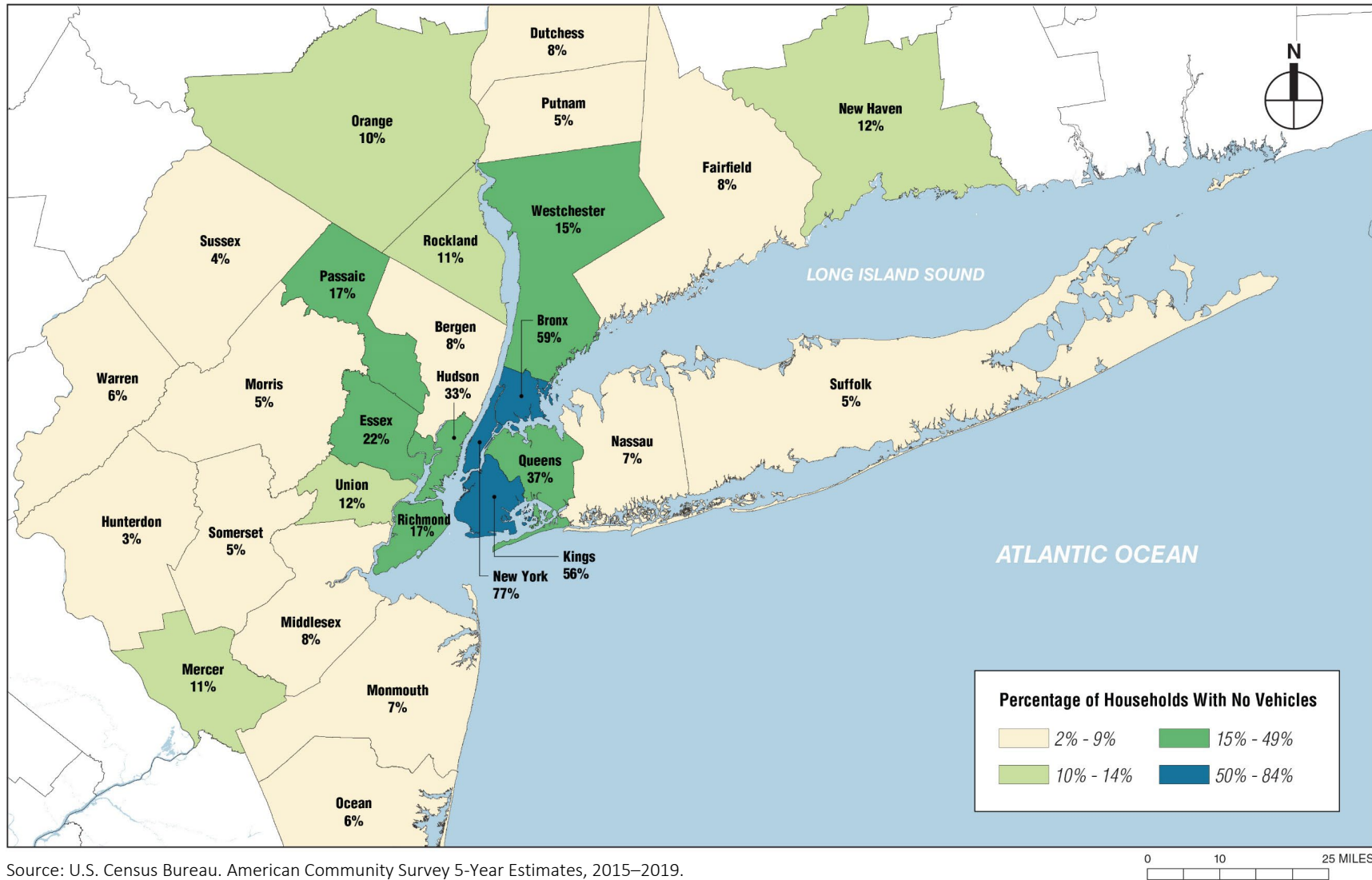
Source: U.S. Census Bureau, CTPP, 2012-2016 Estimates.

employment in the Manhattan CBD. It also provides a more detailed discussion of the use of driving modes to commute to Manhattan from areas of New York City that do not have convenient transit access, since these areas may have fewer alternative to vehicle access for convenient travel to the Manhattan CBD.

<sup>14</sup> FHWA. Status of the Nation's Highways, Bridges, and Transit Conditions & Performance 23rd Edition. Chapter 3, “Travel.” <https://www.fhwa.dot.gov/policy/23cpr/chap3.cfm#access-to-vehicles>.

<sup>15</sup> Trip purpose categories included “Work,” “School,” Social/Recreational,” “Shopping,” and “Other”; more detailed options comprising “Other” included “Personal Business,” “Home to Serving Passengers/Serving Passengers to Home,” and “Other.” New York Metropolitan Transportation Council and New Jersey Transportation Planning Authority. October 2014. 2010/2011 Regional Household Travel Survey. p. 124 (Table 4-19). [www.nymtc.org/portals/0/pdf/RHTS/RHTS\\_FinalExecSummary10.6.2014.pdf](http://www.nymtc.org/portals/0/pdf/RHTS/RHTS_FinalExecSummary10.6.2014.pdf).

Figure 5A-5. Households in the Regional Study Area with No Vehicle by County

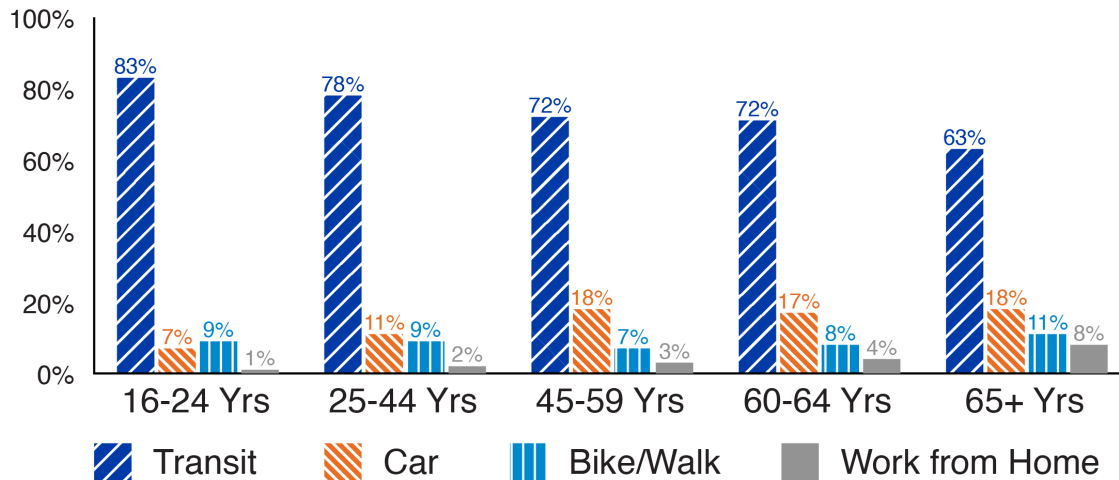


Source: U.S. Census Bureau. American Community Survey 5-Year Estimates, 2015–2019.



Figure 5A-6 provides data on the commute mode choice for travel to work in Manhattan by the age distribution of workers. The most detailed estimates available describe those working in Manhattan as a whole, but these data provide some insight into commute mode and worker age. As Figure 5A-6 shows, the rate of driving or other auto modes to work is highest for ages 45 and over, with approximately 17 percent to 18 percent of workers commuting to Manhattan by auto. The use of public transportation to commute to work decreases with age, with the lowest rate (63 percent) for workers age 65 and older; even for this age group, the majority of workers use public transportation to commute to work in Manhattan.

Figure 5A-6. Travel Modes to Work (by age of workers)



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

Residents of New York City in particular are most likely to use transit to travel to work in the Manhattan CBD (see Chapter 1, “Introduction,” Figure 1-6). 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 work in the Manhattan CBD from outside the CBD use public transportation<sup>16</sup> 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).

Most of New York City is also within one-half mile of the faster public transportation modes available—commuter rail, subway, express bus, or Select Bus Service (SBS), New York City’s growing bus rapid transit system.<sup>17</sup> As shown in Figure 5A-3, few neighborhoods in New York City are more than one-half mile from these faster transportation modes. These areas are at the periphery of the city and along the waterfront (and, as noted, do have local bus service). In Manhattan, these areas include the far west side in the West 50s within the Manhattan CBD and on Roosevelt Island outside the Manhattan CBD. In Brooklyn, areas include the neighborhoods of Red Hook, Borough Park, Rugby-Remsen Village, East New York, and Canarsie. In Queens, portions of the Astoria, College Point, South Ozone Park, Auburndale, Springfield Gardens,

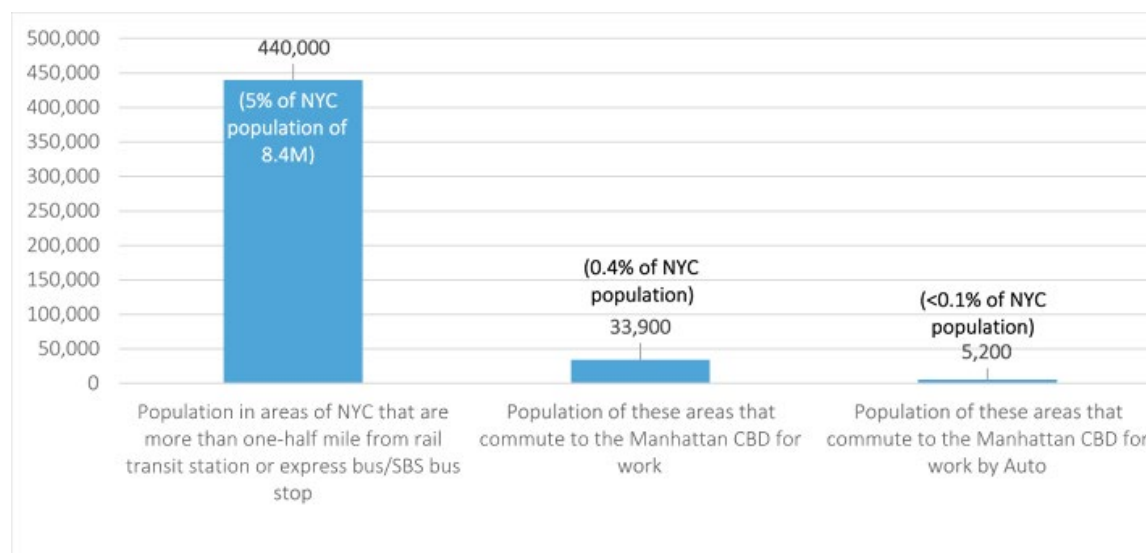
<sup>16</sup> Unless otherwise noted, the terms “public transportation” and “transit” are used interchangeably throughout this chapter.

<sup>17</sup> One-half mile represents an approximately 10- to 15-minute walk for an average pedestrian, and therefore indicates the availability of these transportation services.

Breezy Point, Maspeth, and Ridgewood neighborhoods do not have access to faster public transportation via commuter rail, subway, or express bus/SBS service within one-half mile. In the Bronx, portions of the Soundview, Castle Hill, East Tremont, and Wakefield neighborhoods are more than one-half mile from commuter rail, subway, or express bus/SBS service. In Staten Island, these areas are around the shoreline and in central Staten Island. Some of the areas in New York City that are not close to transit are places from which no one commutes by car to the Manhattan CBD (see **Figure 5A-3**).

Approximately 440,000 people (or about 5.2 percent of the city's 8.4 million residents) live in these areas of New York City that are more than one-half mile from the faster public transportation modes of commuter rail, subway, or express bus/SBS service,<sup>18</sup> and approximately of them 33,900 commute to the Manhattan CBD (**Figure 5A-7**). Approximately 5,200 (15 percent) of these commuters to the Manhattan CBD travel by car.<sup>19</sup> These 5,200 car commuters come from locations distributed around the city with the largest concentrations in the Queens neighborhoods of Maspeth, College Point, Middle Village, and Springfield Gardens, the Soundview neighborhood of the Bronx, and Staten Island. Additional residents may be auto commuters who pass through the Manhattan CBD, but the total number of auto trips, even from areas with less convenient public transit access, is small even if these trips are included. **Chapter 17, "Environmental Justice,"** considers the potential effect of implementation of the CBD Tolling Alternative on low-income and minority populations who live in these areas.

**Figure 5A-7. Population and Commuters to Manhattan CBD from Areas More than One-Half Mile from Commuter Rail, Subway, or Express Bus Service**



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

Note: All areas of New York City other than Breezy Point, Queens, are within a half mile of local bus service.

Outside of New York City, the rest of the regional study area is also well-served by public transportation, including commuter rail, light rail, and public and private bus routes, and as noted previously, most people

<sup>18</sup> This population consists of people living within census tracts that are not within one-half mile of the faster public transportation services, when measured from the center of the census tract to the nearest transit stop.

<sup>19</sup> 2012–2016 CTPP.

who work in the Manhattan CBD use public transportation to travel to and from work. In areas of the regional study area that are farther from New York City and less densely developed and populated, more areas are not within a convenient walking distance of public transportation. However, in those areas, households have a higher rate of access to a vehicle, and residents use or may use their vehicles to access public transportation (e.g., commuter rail stations).

## 5A.4 ENVIRONMENTAL CONSEQUENCES

### 5A.4.1 *No Action Alternative*

The No Action Alternative would not implement a vehicular tolling program with its associated tolling infrastructure and tolling system equipment. With the No Action Alternative, the study area's settlement patterns, transportation mobility (including chronic congestion in and around the Manhattan CBD) would remain similar to the existing affected environment. Overall demographic trends in terms of population and job growth would experience normal background growth. Community cohesion and access to employment for residents of the region would likely be similar to existing conditions.<sup>20</sup>

### 5A.4.2 *CBD Tolling Alternative*

This section describes the potential effects of implementation of the CBD Tolling Alternative on population characteristics and community cohesion, when compared with the No Action Alternative, beginning with a description of the potential benefits of the CBD Tolling Alternative and how they relate to social conditions. The section then evaluates the potential effects of the CBD Tolling Alternative on community cohesion and community facilities and services, its potential benefits or adverse effects to certain vulnerable social groups, including elderly populations, persons with disabilities, transit-dependent populations, and nondriver populations; and its effects on access to employment at the regional level.

#### 5A.4.2.1 POTENTIAL BENEFITS TO SOCIAL CONDITIONS

With implementation of the CBD Tolling Alternative, transportation users in the region would benefit through travel-time savings, improved travel-time reliability, reduced vehicle operating costs, improved safety, and reduced air pollutant emissions. These changes would positively affect community connections and access to employment, education, healthcare, and recreation for residents. The CBD Tolling Alternative would result in the following social benefits:

- **Travel-Time Savings:** People in the region making trips to or within the Manhattan CBD by auto, FHV/taxi, bus, paratransit, or truck would benefit from travel-time savings improvements relative to the No Action Alternative due to decreased congestion within the Manhattan CBD. Part of these travel-time savings benefits would be offset by the increased transportation cost for those trips under the CBD Tolling Alternative in the form of a toll. People traveling by vehicle in the Manhattan CBD would also benefit from travel-time savings due to decreased congestion in the Manhattan CBD and on other roadways. These benefits would occur in all tolling scenarios, with a reduction in vehicles crossing into

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<sup>20</sup> Existing conditions described in this chapter are for conditions prior to the onset of the COVID-19 pandemic and therefore do not reflect changes to social conditions that may emerge as the pandemic subsides. At this time, it would be speculative to describe long-term (post-pandemic) changes to social conditions.

the Manhattan CBD each day ranging from 15.4 percent to 19.9 percent and a reduction in daily VMT in the Manhattan CBD of 7.1 percent to 9.2 percent (see **Table 4A-5** and **Table 4A-7** in **Subchapter 4A, “Transportation: Regional Transportation Effects and Modeling”**). Tolling Scenario E would result in the greatest benefit, with 19.9 percent fewer vehicles entering the Manhattan CBD each day and a reduction of 9.2 percent in VMT relative to the No Action Alternative.

- **Reliability Benefits:** People traveling by auto, taxi/FHV, bus, paratransit, or truck to or within the Manhattan CBD would benefit from improved travel-time reliability due to the reduced congestion. Improvements to transportation system capacity or reliability can have social benefits such as greater ease of making and maintaining social ties and higher quality of life. Reliability of travel time refers to the level of travel time uncertainty. When travel times are unpredictable, travelers typically allow more time for their trip to account for possible delays. By reducing congestion in the Manhattan CBD, the CBD Tolling Alternative would reduce the current uncertainty associated with travel in the Manhattan CBD and allow travelers to reduce the buffer time set aside for their trip. Benefits would accrue not only to automobile passengers but also to bus passengers who would be able to rely on evenly spaced buses with reliable schedules. These benefits would also apply to school bus passengers and users of paratransit services.
- **Safety Benefits:** In all tolling scenarios, the CBD Tolling Alternative would result in fewer vehicles accessing the Manhattan CBD, which would help to reduce conflicts between vehicles and between vehicles and pedestrians and bicyclists, leading to an overall benefit to safety. The reduction in regional VMT because of the CBD Tolling Alternative could also lead to regional safety benefits. Some research indicates that VMT is directly related to the rate of fatal crashes;<sup>21</sup> therefore, the reduction in VMT could lead to a decrease in traffic fatalities in the region. Enhanced safety would benefit social conditions by improving community connectivity, reducing social isolation, and facilitating more physical activity and use of nonmotorized modes of transportation. While the increase in potential safety benefits may be offset to some degree by the propensity for drivers to drive at greater speeds in less congested conditions, experience with the London congestion-based pricing system suggests that the overall effect would be net positive; within the London zone, between 2000 and 2010 traffic collisions decreased by 40 percent per VMT.<sup>22</sup>
- **Accessibility Benefits:** Accessibility can be understood as the attractiveness of a place of origin (how easy it is to get from there to all other destinations) or of a destination (how easy it is to get to there from all other origins). Enhanced accessibility can benefit social conditions by improving community connections and access to employment, education, health care, and recreation. The CBD Tolling Alternative would improve accessibility for travelers throughout the region by decreasing roadway congestion. The CBD Tolling Alternative would also improve accessibility for disabled individuals

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<sup>21</sup> Reid Ewing, Shima Hamidi and James Grace. 2016. “Urban Sprawl as a Risk Factor in Motor Vehicle Crashes,” *Urban Studies*, Vol. 53/2, pp. 247 to 266. [digitalcommons.unl.edu/cgi/viewcontent.cgi?referer=https://www.google.ca/&httpsredir=1&article=1911&context=usgsstaffpub](https://digitalcommons.unl.edu/cgi/viewcontent.cgi?referer=https://www.google.ca/&httpsredir=1&article=1911&context=usgsstaffpub).

<sup>22</sup> Davis, Alex. 2015. “London’s Congestion Pricing Plan is Saving Lives.” *Wired Magazine*. <https://www.wired.com/2015/03/londons-congestion-pricing-plan-saving-lives/>.

throughout the region by providing benefits to improve paratransit services, such as reduced roadway congestion and travel-time improvements as discussed above.

#### 5A.4.2.2 COMMUNITY COHESION

This section evaluates potential effects to community cohesion resulting from the CBD Tolling Alternative. As noted previously in the discussion of the affected environment, community cohesion and civic life in the regional study area are typically local, organized around neighborhoods and communities, and in most cases are not focused on economic, social, and cultural ties to the Manhattan CBD. Therefore, this analysis focuses on the three primary ways the CBD Tolling Alternative could potentially affect community cohesion through travel pattern changes to and from the Manhattan CBD:

- **Installation of Tolling Infrastructure and Equipment:** The CBD Tolling Alternative would involve the installation of tolling infrastructure and tolling system equipment. This analysis considers whether this infrastructure and equipment would create a physical barrier that could separate or isolate communities.
- **Changes to Travel Patterns:** The CBD Tolling Alternative would change travel patterns and alter people's choices of how to travel into and out of the Manhattan CBD and would encourage more people to use transit to access the Manhattan CBD. The concern with respect to changing travel patterns and greater use of transit services is whether these changes would weaken community cohesion either by making it more difficult for people to physically connect with others throughout the region or by overburdening transit infrastructure that communities rely on for social ties.
- **Potential for Residential Displacement:** The CBD Tolling Alternative would not require any property acquisition or direct displacement of residences. This analysis evaluates whether implementation of the CBD Tolling Alternative would have the potential to result in indirect displacement of residents.

The following subsections address each of these concerns with respect to community cohesion. In addition, **Chapter 17, "Environmental Justice,"** considers these effects on low-income and minority populations.

##### *Installation of Tolling Infrastructure and Equipment*

The CBD Tolling Alternative would place tolling infrastructure and tolling system equipment within or adjacent to existing transportation rights-of-way, including sidewalks, and, in very limited instances, public parkland. As discussed in **Chapter 2, "Project Alternatives," Section 2.4.2.2**, the tolling infrastructure would include poles and mast arms, similar to those used for streetlights and traffic lights today; tolling system equipment including reader and meter cabinets and cameras; and signage similar in size and character to signs already present throughout Manhattan. **Chapter 2, "Project Alternatives," Figure 2-3** illustrates the proposed infrastructure; in addition, figures in **Chapter 9, "Visual Resources,"** provide before and after views of selected locations where new tolling infrastructure and tolling system equipment is proposed. The signage would be similar in size and nature to existing signs already in place. Therefore, this tolling infrastructure, tolling system equipment, and signage would not create a physical barrier that could separate or isolate communities, and therefore would not result in adverse effects to community cohesion.

### ***Changes to Travel Patterns***

The new toll for vehicles entering or remaining in the Manhattan CBD with the CBD Tolling Alternative would change travel patterns and alter people's choices of how to travel into and out of the Manhattan CBD. This section summarizes the changes in daily trips under the No Action Alternative and with the CBD Tolling Alternative. The transportation modeling conducted for the Project using the Best Practice Model (BPM) provides information on the projected changes in travel patterns between the No Action Alternative and the CBD Tolling Alternative (**Subchapter 4A, "Transportation: Regional Transportation Effects and Modeling"**). The BPM results include changes in daily journeys, which are the round-trips from origin to destination and back to origin again.<sup>23</sup> The BPM is a regional transportation model used to predict changes in mode and route that would result from modifications to the transportation system, using adopted regional population, labor force, and employment forecasts. The model does not (and cannot) predict changes to the numbers of residents, workers, or jobs in the region but rather assumes that those numbers remain constant.

The section presents the change in total daily journeys to the Manhattan CBD and the change in non-work-related journeys (e.g., daily round trips with any combination or linked trips excluding the journey to work such as school, shopping, medical care, or entertainment purposes) to the Manhattan CBD. The different tolling scenarios would have varying effects on different areas (e.g., New Jersey vs. Long Island), and the particular tolling scenario that would result in the greatest change in trips varies depending on the area. This section presents data on travel patterns for each tolling scenario for each subarea of the regional study area.<sup>24</sup> The travel pattern data presented in this section include all modes of transport, including auto modes, public transportation modes, and walking and biking.<sup>25</sup>

#### Changes to Total Daily Journeys to the Manhattan CBD by All Modes

Overall, the model results show that all tolling scenarios would result in changes to the distribution of total daily journeys to the Manhattan CBD compared to the No Action Alternative, with an increase in total daily journeys from New Jersey and Long Island and a decrease in total daily journeys from portions of New York north of New York City, and Upper Manhattan, the Bronx, Queens, and Brooklyn. **Table 5A-2** and **Table 5A-3** present data on projected total daily journeys to the Manhattan CBD for each tolling scenario. The largest decrease in travel via all modes (i.e., including auto, public transportation, and walk/bike modes) into the Manhattan CBD would be approximately 3 percent for areas of Manhattan outside the Manhattan CBD under Tolling Scenario D. Daily journeys between New Jersey counties and the Manhattan CBD would increase by 1.9 percent to 3.5 percent and daily journeys between Long Island and the Manhattan CBD would increase by 2.5 percent to 3.7 percent, depending on the tolling scenario. In New York City, daily journeys to and from the Manhattan CBD would decrease in the Bronx, Brooklyn, other areas of Manhattan, and Queens, but would increase in Staten Island. The rest of Manhattan would have the largest percentage

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<sup>23</sup> More specifically, as described in **Subchapter 4A, "Transportation: Regional Transportation Effects and Modeling,"** a journey is defined as round-trip travel between principal and anchor locations such as home, work, school, retail, and entertainment.

<sup>24</sup> Subareas include each New York City county (boroughs), outside the Manhattan CBD, inside the Manhattan CBD, Long Island counties, New York counties north of New York City, New Jersey counties, and Connecticut counties.

<sup>25</sup> Modes of transport in the BPM consist of the following: drive alone, high-occupancy vehicle/shared ride, taxi/FHV, commuter rail, other transit (e.g., subway, bus), walk and bike, and school bus.

decrease in daily travel into the Manhattan CBD, with a decrease of approximately 1.5 percent to 2.8 percent, depending on the tolling scenario. Staten Island would experience an increase of approximately 3.8 percent to 7.2 percent in daily journeys to the Manhattan CBD, depending on the tolling scenario, with the absolute number compared to the No Action Alternative of approximately 1,600 to 3,000 new journeys.

#### Changes to Daily Non-Work-Related Journeys to the Manhattan CBD by All Modes

**Table 5A-4** and **Table 5A-5** show the projected change in daily non-work-related travel into the Manhattan CBD by county of origin for all tolling scenarios (by all modes of transport [i.e., auto modes, public transportation modes, and walking/biking]). For non-work-related journeys, the BPM assumes that the total number of these discretionary trips remains steady regionwide, but the destination of non-work-related travel (e.g., for school, shopping, medical care, or entertainment or a combination of such trips) could change because of a change to the transportation network. For all tolling scenarios, the total number of these journeys would remain essentially the same between tolling scenarios (the small differences are due to rounding in the model results), but the destinations of the non-work-related journeys would vary. The largest percentage decreases in non-work-related journeys into the Manhattan CBD would be from New York counties north of New York City, with a decrease of 12 percent under Tolling Scenario E, a decrease of approximately 900 daily journeys. Brooklyn, Queens, and the Bronx would experience smaller percentage decreases of 2.9 percent (Tolling Scenario D), 2.8 percent (Tolling Scenario D), and 4.4 percent (Tolling Scenario E), respectively. Brooklyn and Queens would experience decreases of approximately 2,300 and 1,800 journeys, respectively. Non-work-related journeys to the Manhattan CBD from areas of Manhattan north of 60th Street would also decrease, with the greatest decrease (3,800 daily journeys) under Tolling Scenario D (decrease of 4.3 percent). The BPM projects an increase in non-work-related journeys from New Jersey counties, Long Island, Connecticut counties, and Staten Island to the Manhattan CBD. **Table 5A-5** also shows marginal increases in non-work Manhattan CBD journeys originating within the Manhattan CBD, likely due to reductions in congestion, which would encourage additional non-work journeys within the Manhattan CBD. Overall, in all tolling scenarios, the decrease in non-work-related journeys to the Manhattan CBD would be from origins distributed throughout the 28-county study area, from many different communities throughout the region.

#### Potential Community Cohesion Effects

The model results indicate that with the CBD Tolling Alternative some areas would have more trips to the Manhattan CBD and some areas would have fewer, as compared to the No Action Alternative. As noted above, the concern with respect to changing travel patterns is whether they would weaken community cohesion by making it more difficult for people to physically connect with others in their community.

Table 5A-2. Total Daily Journeys to/from the Manhattan CBD by Tolling Scenario (2023, All Modes)

ORIGIN GEOGRAPHIC AREA	NO ACTION	SCENARIO A	SCENARIO B	SCENARIO C	SCENARIO D	SCENARIO E	SCENARIO F	SCENARIO G
<b>New York City</b>	<b>2,139,533</b>	<b>2,131,066</b>	<b>2,131,928</b>	<b>2,130,513</b>	<b>2,125,391</b>	<b>2,125,464</b>	<b>2,127,367</b>	<b>2,128,633</b>
Bronx	155,745	153,637	154,033	153,142	152,314	152,183	153,269	152,802
Kings (Brooklyn)	406,340	404,134	405,087	403,773	402,173	402,084	404,271	403,533
New York (Manhattan)	1,176,953	1,173,182	1,172,443	1,173,240	1,172,230	1,172,844	1,170,525	1,172,714
Inside Manhattan CBD <sup>1</sup>	879,667	880,292	879,506	882,033	883,365	883,222	880,713	881,592
Outside Manhattan CBD	297,286	292,890	292,937	291,207	288,865	289,622	289,812	291,122
Queens	358,122	355,812	356,002	354,938	354,368	354,350	354,576	355,266
Richmond (Staten Island)	42,373	44,301	44,363	45,420	44,306	44,003	44,726	44,318
<b>Long Island Counties<sup>2</sup></b>	<b>160,446</b>	<b>165,458</b>	<b>166,094</b>	<b>164,980</b>	<b>164,610</b>	<b>165,643</b>	<b>164,487</b>	<b>166,421</b>
<b>New York Counties North of New York City<sup>3</sup></b>	<b>113,457</b>	<b>111,112</b>	<b>111,518</b>	<b>111,855</b>	<b>110,885</b>	<b>110,632</b>	<b>111,111</b>	<b>111,318</b>
<b>New Jersey Counties<sup>4</sup></b>	<b>329,943</b>	<b>336,247</b>	<b>336,616</b>	<b>338,878</b>	<b>340,413</b>	<b>341,579</b>	<b>341,330</b>	<b>338,753</b>
<b>Connecticut Counties<sup>5</sup></b>	<b>59,997</b>	<b>59,798</b>	<b>60,153</b>	<b>60,297</b>	<b>60,191</b>	<b>59,398</b>	<b>60,505</b>	<b>59,392</b>
<b>TOTAL</b>	<b>2,803,376</b>	<b>2,803,681</b>	<b>2,806,309</b>	<b>2,806,523</b>	<b>2,801,490</b>	<b>2,802,716</b>	<b>2,804,800</b>	<b>2,804,517</b>

Source: BPM, WSP 2021.

<sup>1</sup> Journeys originating in the Manhattan CBD are internal journeys within the Manhattan CBD.<sup>2</sup> Long Island counties include Nassau and Suffolk.<sup>3</sup> New York counties north of New York City include Dutchess, Orange, Putnam, Rockland, and Westchester.<sup>4</sup> New Jersey counties include Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union, and Warren.<sup>5</sup> Connecticut counties include Fairfield and New Haven.



Table 5A-3. Change in Total Daily Journeys to/from the Manhattan CBD Compared to No Action Alternative (2023, All Modes)

ORIGIN GEOGRAPHIC AREA	SCENARIO A		SCENARIO B		SCENARIO C		SCENARIO D		SCENARIO E		SCENARIO F		SCENARIO G	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
<b>New York City</b>	<b>-8,467</b>	<b>-0.4%</b>	<b>-7,605</b>	<b>-0.4%</b>	<b>-9,020</b>	<b>-0.4%</b>	<b>-14,142</b>	<b>-0.7%</b>	<b>-14,069</b>	<b>-0.7%</b>	<b>-12,166</b>	<b>-0.6%</b>	<b>-10,900</b>	<b>-0.5%</b>
Bronx	-2,108	-1.4%	-1,712	-1.1%	-2,603	-1.7%	-3,431	-2.2%	-3,562	-2.3%	-2,476	-1.6%	-2,943	-1.9%
Kings (Brooklyn)	-2,206	-0.5%	-1,253	-0.3%	-2,567	-0.6%	-4,167	-1.0%	-4,256	-1.0%	-2,069	-0.5%	-2,807	-0.7%
New York (Manhattan)	-3,771	-0.3%	-4,510	-0.4%	-3,713	-0.3%	-4,723	-0.4%	-4,109	-0.3%	-6,428	-0.5%	-4,239	-0.4%
Inside Manhattan CBD <sup>1</sup>	625	0.1%	-161	0.0%	2,366	0.3%	3,698	0.4%	3,555	0.4%	1,046	0.1%	1,925	0.2%
Outside Manhattan CBD	-4,396	-1.5%	-4,349	-1.5%	-6,079	-2.0%	-8,421	-2.8%	-7,664	-2.6%	-7,474	-2.5%	-6,164	-2.1%
Queens	-2,310	-0.6%	-2,120	-0.6%	-3,184	-0.9%	-3,754	-1.0%	-3,772	-1.1%	-3,546	-1.0%	-2,856	-0.8%
Richmond (Staten Island)	1,928	4.6%	1,990	4.7%	3,047	7.2%	1,933	4.6%	1,630	3.8%	2,353	5.6%	1,945	4.6%
<b>Long Island Counties<sup>2</sup></b>	<b>5,012</b>	<b>3.1%</b>	<b>5,648</b>	<b>3.5%</b>	<b>4,534</b>	<b>2.8%</b>	<b>4,164</b>	<b>2.6%</b>	<b>5,197</b>	<b>3.2%</b>	<b>4,041</b>	<b>2.5%</b>	<b>5,975</b>	<b>3.7%</b>
<b>New York Counties North of New York City<sup>3</sup></b>	<b>-2,345</b>	<b>-2.1%</b>	<b>-1,939</b>	<b>-1.7%</b>	<b>-1,602</b>	<b>-1.4%</b>	<b>-2,572</b>	<b>-2.3%</b>	<b>-2,825</b>	<b>-2.5%</b>	<b>-2,346</b>	<b>-2.1%</b>	<b>-2,139</b>	<b>-1.9%</b>
<b>New Jersey Counties<sup>4</sup></b>	<b>6,304</b>	<b>1.9%</b>	<b>6,673</b>	<b>2.0%</b>	<b>8,935</b>	<b>2.7%</b>	<b>10,470</b>	<b>3.2%</b>	<b>11,636</b>	<b>3.5%</b>	<b>11,387</b>	<b>3.5%</b>	<b>8,810</b>	<b>2.7%</b>
<b>Connecticut Counties<sup>5</sup></b>	<b>-199</b>	<b>-0.3%</b>	<b>156</b>	<b>0.3%</b>	<b>300</b>	<b>0.5%</b>	<b>194</b>	<b>0.3%</b>	<b>-599</b>	<b>-1.0%</b>	<b>508</b>	<b>0.8%</b>	<b>-605</b>	<b>-1.0%</b>
<b>TOTAL</b>	<b>305</b>	<b>0.0%</b>	<b>2,933</b>	<b>0.1%</b>	<b>3,147</b>	<b>0.1%</b>	<b>-1,886</b>	<b>-0.1%</b>	<b>-660</b>	<b>0.0%</b>	<b>1,424</b>	<b>0.1%</b>	<b>1,141</b>	<b>0.0%</b>

Source: BPM, WSP 2021.

<sup>1</sup> Journeys originating in the Manhattan CBD are internal journeys within the Manhattan CBD.<sup>2</sup> Long Island counties include Nassau and Suffolk.<sup>3</sup> New York counties north of New York City include Dutchess, Orange, Putnam, Rockland, and Westchester.<sup>4</sup> New Jersey counties include Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union, and Warren.<sup>5</sup> Connecticut counties include Fairfield and New Haven.

Table 5A-4. Daily Non-Work-Related Journeys into the Manhattan CBD by County of Origin (2023, All Modes)

ORIGIN GEOGRAPHIC AREA	NO ACTION	SCENARIO A	SCENARIO B	SCENARIO C	SCENARIO D	SCENARIO E	SCENARIO F	SCENARIO G
<b>New York City</b>	<b>796,263</b>	<b>793,158</b>	<b>795,050</b>	<b>793,230</b>	<b>790,236</b>	<b>790,916</b>	<b>793,468</b>	<b>792,147</b>
Bronx	41,511	40,239	40,971	40,352	39,707	39,691	40,314	40,401
Kings (Brooklyn)	80,405	79,193	79,998	79,218	78,082	78,373	79,390	78,643
New York (Manhattan)	601,900	601,749	601,362	600,892	600,864	601,196	601,131	601,306
Inside Manhattan CBD <sup>1</sup>	513,511	515,465	514,613	514,979	516,264	516,425	515,506	515,380
Outside Manhattan CBD	88,389	86,284	86,749	85,913	84,600	84,771	85,625	85,926
Queens	61,828	60,638	61,236	60,645	60,069	60,423	61,129	60,413
Richmond (Staten Island)	10,619	11,339	11,483	12,123	11,514	11,233	11,504	11,384
<b>Long Island Counties<sup>2</sup></b>	<b>16,566</b>	<b>17,188</b>	<b>17,314</b>	<b>16,675</b>	<b>16,568</b>	<b>16,789</b>	<b>16,724</b>	<b>17,382</b>
<b>New York Counties North of New York City<sup>3</sup></b>	<b>7,640</b>	<b>7,162</b>	<b>7,182</b>	<b>7,190</b>	<b>6,752</b>	<b>6,749</b>	<b>6,962</b>	<b>7,066</b>
<b>New Jersey Counties<sup>4</sup></b>	<b>46,807</b>	<b>48,993</b>	<b>49,582</b>	<b>50,187</b>	<b>49,701</b>	<b>49,956</b>	<b>50,305</b>	<b>50,063</b>
<b>Connecticut Counties<sup>5</sup></b>	<b>1,514</b>	<b>1,486</b>	<b>1,786</b>	<b>1,872</b>	<b>1,807</b>	<b>1,720</b>	<b>1,901</b>	<b>1,764</b>
<b>TOTAL</b>	<b>868,790</b>	<b>867,987</b>	<b>870,914</b>	<b>869,154</b>	<b>865,064</b>	<b>866,130</b>	<b>869,360</b>	<b>868,422</b>

Source: BPM, WSP 2021.

<sup>1</sup> Journeys originating in the Manhattan CBD are internal journeys within the Manhattan CBD.<sup>2</sup> Long Island counties include Nassau and Suffolk.<sup>3</sup> New York counties north of New York City include Dutchess, Orange, Putnam, Rockland, and Westchester.<sup>4</sup> New Jersey counties include Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union, and Warren.<sup>5</sup> Connecticut counties include Fairfield and New Haven.

Table 5A-5. Change in Daily Non-Work-Related Journeys into the Manhattan CBD Compared to No Action Alternative (2023, All Modes)

ORIGIN GEOGRAPHIC AREA	SCENARIO A		SCENARIO B		SCENARIO C		SCENARIO D		SCENARIO E		SCENARIO F		SCENARIO G	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
<b>New York City</b>	<b>-3,105</b>	<b>-0.4%</b>	<b>-1,213</b>	<b>-0.2%</b>	<b>-3,033</b>	<b>-0.4%</b>	<b>-6,027</b>	<b>-0.8%</b>	<b>-5,347</b>	<b>-0.7%</b>	<b>-2,795</b>	<b>-0.4%</b>	<b>-4,116</b>	<b>-0.5%</b>
Bronx	-1,272	-3.1%	-540	-1.3%	-1,159	-2.8%	-1,804	-4.3%	-1,820	-4.4%	-1,197	-2.9%	-1,110	-2.7%
Kings (Brooklyn)	-1,212	-1.5%	-407	-0.5%	-1,187	-1.5%	-2,323	-2.9%	-2,032	-2.5%	-1,015	-1.3%	-1,762	-2.2%
New York (Manhattan)	-151	0.0%	-538	-0.1%	-1,008	-0.2%	-1,036	-0.2%	-704	-0.1%	-769	-0.1%	-594	-0.1%
Inside Manhattan CBD <sup>1</sup>	1,954	0.4%	1,102	0.2%	1,468	0.3%	2,753	0.5%	2,914	0.6%	1,995	0.4%	1,869	0.4%
Outside Manhattan CBD	-2,105	-2.4%	-1,640	-1.9%	-2,476	-2.8%	-3,789	-4.3%	-3,618	-4.1%	-2,764	-3.1%	-2,463	-2.8%
Queens	-1,190	-1.9%	-592	-1.0%	-1,183	-1.9%	-1,759	-2.8%	-1,405	-2.3%	-699	-1.1%	-1,415	-2.3%
Richmond (Staten Island)	720	6.8%	864	8.1%	1,504	14.2%	895	8.4%	614	5.8%	885	8.3%	765	7.2%
<b>Long Island Counties<sup>2</sup></b>	<b>622</b>	<b>3.8%</b>	<b>748</b>	<b>4.5%</b>	<b>109</b>	<b>0.7%</b>	<b>2</b>	<b>0.0%</b>	<b>223</b>	<b>1.3%</b>	<b>158</b>	<b>1.0%</b>	<b>816</b>	<b>4.9%</b>
<b>New York Counties</b>														
<b>North of New York City<sup>3</sup></b>	<b>-478</b>	<b>-6.3%</b>	<b>-458</b>	<b>-6.0%</b>	<b>-450</b>	<b>-5.9%</b>	<b>-888</b>	<b>-11.6%</b>	<b>-891</b>	<b>-11.7%</b>	<b>-678</b>	<b>-8.9%</b>	<b>-574</b>	<b>-7.5%</b>
<b>New Jersey Counties<sup>4</sup></b>	<b>2,186</b>	<b>4.7%</b>	<b>2,775</b>	<b>5.9%</b>	<b>3,380</b>	<b>7.2%</b>	<b>2,894</b>	<b>6.2%</b>	<b>3,149</b>	<b>6.7%</b>	<b>3,498</b>	<b>7.5%</b>	<b>3,256</b>	<b>7.0%</b>
<b>Connecticut Counties<sup>5</sup></b>	<b>-28</b>	<b>-1.8%</b>	<b>272</b>	<b>18.0%</b>	<b>358</b>	<b>23.6%</b>	<b>293</b>	<b>19.4%</b>	<b>206</b>	<b>13.6%</b>	<b>387</b>	<b>25.6%</b>	<b>250</b>	<b>16.5%</b>
<b>TOTAL</b>	<b>-803</b>	<b>-0.1%</b>	<b>2,124</b>	<b>0.2%</b>	<b>364</b>	<b>0.0%</b>	<b>-3,726</b>	<b>-0.4%</b>	<b>-2,660</b>	<b>-0.3%</b>	<b>570</b>	<b>0.1%</b>	<b>-368</b>	<b>0.0%</b>

Source: BPM, WSP 2021.

<sup>1</sup> Journeys originating in the Manhattan CBD are internal journeys within the Manhattan CBD.<sup>2</sup> Long Island counties include Nassau and Suffolk.<sup>3</sup> New York counties north of New York City include Dutchess, Orange, Putnam, Rockland, and Westchester.<sup>4</sup> New Jersey counties include Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union, and Warren.<sup>5</sup> Connecticut counties include Fairfield and New Haven.

The journeys presented in the BPM results are for travel undertaken between two geographic areas for a particular reason—work, school, shopping, medical care, entertainment, etc. These are activities that indicate social and community ties between two areas. An increase in total daily journeys and daily non-work-related journeys to the Manhattan CBD suggests that a geographic area would potentially have more social ties and stronger community connections to the Manhattan CBD with the CBD Tolling Alternative as compared to the No Action Alternative. As described in the previous subsection, areas that would see increases in daily trips to the Manhattan CBD include New Jersey, Long Island, and Staten Island. The model results also show marginal increases in nonwork-related Manhattan CBD journeys originating within the Manhattan CBD, indicating additional journeys and connections for Manhattan CBD residents likely due to the reduction in congestion in the Manhattan CBD.

A decrease in total daily journeys and daily non-work-related journeys to the Manhattan CBD suggests that a geographic area could have fewer social ties and weaker community connections to the Manhattan CBD with the CBD Tolling Alternative as compared to the No Action Alternative. However, as described earlier, the decreases in total daily journeys and daily non-work-related journeys would be small—in general, decreases of about 4 percent or less depending on the origin geographic area and the tolling scenario. Where decreases of more than 4 percent would occur (e.g., the decrease in daily non-work-related journeys from New York counties north of New York City), the number of forgone journeys would be very small (approximately 900 journeys under Tolling Scenario E), compared to overall number of daily non-work-related journeys to the Manhattan CBD. Moreover, as noted earlier, the decrease in non-work-related journeys to the Manhattan CBD would be from origins distributed throughout the 28-county study area, from many different communities throughout the region. The decrease in total daily journeys and daily non-work-related journeys to the Manhattan CBD and their distribution throughout the region, rather than from particular locations or communities, indicates that most regional social ties and community connections to the Manhattan CBD would be maintained with the CBD Tolling Alternative.

For New York City, the model results predict decreases in total daily journeys and non-work-related journeys to the Manhattan CBD from Brooklyn, Queens, the Bronx, and areas of Manhattan north of 60th Street. In these areas, many different communities, including the physical neighborhoods and other cultural, religious, artistic, or activity-based communities, are closely tied to the Manhattan CBD. The decrease in non-work-related journeys to the Manhattan CBD from areas of Manhattan north of 60th Street, Brooklyn, Queens, and the Bronx, indicate that the CBD Tolling Alternative would discourage some travel into the Manhattan CBD by making driving there more expensive. As previously described, the forgone journeys to the Manhattan CBD from other areas of New York City would be a very small portion of the total daily journeys and non-work-related journeys to the Manhattan CBD from those areas, indicating that community cohesion and connection to the Manhattan CBD would be maintained. As noted earlier in the discussion of the affected environment, most people use transit to make their trips to the Manhattan CBD, and these trips would not be affected by the CBD Tolling Alternative.

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 (see **Figure 5A-3**). For example, Manhattan's Chinatown neighborhood is an important destination for New York City's Chinese American

community, as are other specific neighborhoods throughout New York City and the region, such as those in Flushing, Queens; and Sunset Park, Bensonhurst, and Sheepshead Bay, Brooklyn. Access to Manhattan's Chinatown may be important for community cohesion among residents of these neighborhoods, and these areas would continue to have transit access to the Manhattan CBD with the CBD Tolling Alternative. Within Manhattan, neighborhoods are highly walkable or accessible via transit across 60th Street into the Manhattan CBD for most people. (For a discussion of effects on vulnerable social groups, including elderly populations, persons with disabilities, and transit-dependent populations, see **Subsection 5A.4.2.4, "Effects on Vulnerable Social Groups,"** later in this subchapter.)

As described in **Subchapter 4A, "Transportation: Regional Transportation Effects and Modeling,"** the CBD Tolling Alternative would result in a mode shift to transit across the region, with some of the decline in auto access to the Manhattan CBD translating to increases in transit trips (e.g., commuter rail, subway, bus, tram, and ferry). As discussed in **Subchapter 4C, "Transportation: Transit,"** the CBD Tolling Alternative would not result in adverse effects to the line-haul capacity of transit services serving the Manhattan CBD. None of the passenger increases on rail and subway transit routes or buses entering the Manhattan CBD, or on the Staten Island Ferry, would result in adverse effects related to line-haul capacity.<sup>26</sup> For subway routes, passenger increases would be below the impact threshold increment of 5 or more new passengers per car during the AM peak hour. There would be increased ridership on bus routes that would be accommodated by existing service levels. The CBD Tolling Alternative would also result in an increase in the number of passengers using transit stations in the regional transit system. As discussed in **Subchapter 4C, "Transportation: Transit,"** with improvements, the CBD Tolling Alternative would not result in unmitigated adverse effects on transit stations. Consequently, overall, potential transit ridership increases resulting from the CBD Tolling Alternative would not adversely affect community cohesion by overburdening transit infrastructure.

Notwithstanding the transit accessibility between the Manhattan CBD, New York City, and the regional study area, there would be an additional cost with the CBD Tolling Alternative for individuals who choose to drive, who do not have access to transit, or who must rely on driving to get to the Manhattan CBD. As noted in **Chapter 17, "Environmental Justice,"** and **Chapter 18, "Agency Coordination and Public Participation,"** 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 travelling regionally to visit family and friends outside the Manhattan CBD. The costs incurred by individuals driving to the Manhattan CBD would vary widely, depending on individual circumstances and the specific tolling scenario (see **Subchapter 4A, "Transportation: Regional Transportation Effects and Modeling," Section 4A.4.5**). 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, and it is likely that people

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<sup>26</sup> Transit line-haul capacity is the capacity of a transit mode at its peak ridership point.

who drive regularly have higher incomes.<sup>27</sup> Individuals who drive less frequently would incur lower costs because of the toll.

### ***Potential for Residential Displacement***

Another concern related to community cohesion is the potential for a project to affect population and housing characteristics of an area by causing direct or indirect residential displacement.

Direct residential displacement occurs when residents must move from their homes as a direct result of an action. As noted above, the tolling infrastructure and tolling system equipment associated with the CBD Tolling Alternative would be within or adjacent to existing transportation rights-of-way, including sidewalks, and, in very limited instances, public parkland, and would not involve the acquisition of private property or the displacement of any residential uses.

Indirect residential displacement occurs when a change in socioeconomic conditions resulting from a project leads to conditions that require residents to move, such as increased rents or other increases in the cost of living. As noted in **Chapter 17, “Environmental Justice,”** and **Chapter 18, “Agency Coordination and Public Participation,”** during early public outreach for the Project in fall 2021, members of the public voiced concerns about the potential for indirect displacement of low-income residents to occur as a result of the CBD Tolling Alternative.

Indirect residential displacement can occur when a project results in substantial new development that is markedly different from existing uses, development, and activities within a neighborhood, and thus alters one or more of the underlying forces that shape real estate market conditions in an area. The CBD Tolling Alternative would not result in substantial new development or uses that would be markedly different from existing uses and activities within neighborhoods. More importantly, as discussed in this subsection, the CBD Tolling Alternative would not alter socioeconomic conditions related to the following, and therefore would not be likely to result in indirect displacement:

- Potential for residents relocating to avoid the cost of the toll
- Potential for indirect displacement because of increased cost of living within the Manhattan CBD or elsewhere

#### Potential for Residents Relocating to Avoid the Cost of the Toll

The CBD Tolling Alternative would introduce a new cost for residents of the Manhattan CBD who travel by vehicle into and out of the Manhattan CBD. However, only a small percentage of journeys within and from the Manhattan CBD are by vehicle, and residents who travel by other modes would not pay the toll. As described earlier in this subchapter in the discussion of the affected environment, approximately 20 percent of the residents of the Manhattan CBD have access to a vehicle. Based on the BPM results, approximately 1.0 million total daily journeys would occur within or from the Manhattan CBD under any tolling scenario and in the No Action Alternative, and approximately 10 percent of these journeys would be

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<sup>27</sup> FHWA. *Status of the Nation's Highways, Bridges, and Transit. Conditions & Performance. 23rd Edition.* Chapter 3 Travel. Impact of Income Distribution on Travel. October 22, 2020. <https://www.fhwa.dot.gov/policy/23cpr/index.cfm>.

by driving (either the drive alone, high-occupancy vehicle, or taxi/FHV modes). In addition, residents of the Manhattan CBD 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, as discussed in **Chapter 2, “Project Alternatives.”** Overall, the additional cost of the toll is not expected to substantively affect population characteristics of the Manhattan CBD by inducing CBD residents to relocate to avoid the toll.

For other residents of the regional study area, the new toll with the CBD Tolling Alternative could lead them to relocate out of the region entirely to avoid extra commuting costs. However, this would be unlikely to result in indirect residential displacement. Many factors influence a household’s decision about where to live, and each household seeking to avoid the toll would undertake its own decision-making process. Any changes in residential patterns 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, including housing costs, work location and commuting, income, proximity to family and friends, schools, and perceptions about safety and crime. Certain households, such as low-income households or those tied to protected housing units (i.e., housing units that are rent-stabilized, rent-controlled, public housing, Mitchell-Lama rental, or subject to other regulations), may not be able to afford to move. Households seeking to avoid the toll would undertake their own decision-making process balancing these and other factors and reflecting their own unique priorities and preferences, and they would reach different conclusions about whether to relocate and, if so, to where. It is unlikely that the toll would outweigh the other factors that influence a household’s decision on where to live such that it would result in indirect residential displacement. Furthermore, areas near the Manhattan CBD, where residents have the most social and community ties to the Manhattan CBD and are most likely to travel regularly to the Manhattan CBD, have high levels of transit access to the Manhattan CBD. Residents of these areas would continue to be able to use transit to access the Manhattan CBD and avoid the toll. Therefore, the CBD Tolling Alternative would not substantively affect population characteristics of the regional study area by incentivizing residents to relocate to avoid the toll.

The new toll with the CBD Tolling Alternative would increase the cost of driving into the Manhattan CBD, which could make residential neighborhoods near transit—including the Manhattan CBD itself—more attractive for residents, because this could help residents avoid the toll. However, this is unlikely to affect real estate market values either within the Manhattan CBD or elsewhere. Similar to residents who might seek to relocate from the Manhattan CBD or regional study area, 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. Therefore, no particular area would be likely to see a large inflow or outflow of new residents seeking to avoid the toll, and the CBD Tolling Alternative would be unlikely to result in notable changes in real estate market conditions. Any relocation that may occur because of households seeking to avoid the toll would not have the potential to markedly change the demographic or community character of an area, and therefore would not adversely affect community cohesion.

### Potential for Indirect Displacement Because of Increased Cost of Living Within the Manhattan CBD or Elsewhere

During early public outreach for the Project in fall 2021, some commenters raised concerns that the CBD Tolling Alternative would result in increased costs of living within the Manhattan CBD that would result in indirect displacement of low-income residents. However, this is unlikely to occur, because 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 low-income residents of the Manhattan CBD would be entitled to a tax credit to offset their tolls.

In terms of increased real estate values, as noted earlier, 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. The CBD Tolling Alternative itself would not introduce a new residential amenity that could substantively alter rents. 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 some research indicates that a reduction in traffic congestion resulting from congestion pricing could increase residential sales prices and thus could exert upward pressure on rents,<sup>28</sup> the potential social, economic, and environmental benefits from the CBD Tolling Alternative—some of which are detailed in other subsections of this subchapter—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 prices increases.<sup>29</sup> 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

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<sup>28</sup> A study of conditions in London found that reductions in traffic in the congestion zone increased residential sales prices in the congestion zone. Tang, Cheng Keat. 2018. "Essays in the economics of transportation, housing and discrimination." PhD thesis, The London School of Economics and Political Science. [etheses.lse.ac.uk/3797/](https://etheses.lse.ac.uk/3797/).

<sup>29</sup> Estimates of protected units in the Manhattan CBD are not available, but approximately 58 percent of the renter-occupied households in New York City reside in protected housing units (i.e., housing units that are rent stabilized, rent controlled, public housing, Mitchell-Lama rental, or subject to HUD or other regulation) with a substantial proportion of these units in Manhattan. Source: Waickman, C. R., Jerome, J. B. R., Place, R. *Sociodemographics of Rent Stabilized Tenants*. New York City Department of Housing Preservation and Development. 2018. [www1.nyc.gov/assets/hpd/downloads/pdfs/services/rent-regulation-memo-1.pdf](http://www1.nyc.gov/assets/hpd/downloads/pdfs/services/rent-regulation-memo-1.pdf).



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, as discussed in **Chapter 6, “Economic Conditions,”** the cost of new tolls with the CBD Tolling Alternative would not be likely to result in an appreciable increase in the cost of goods within the Manhattan CBD. In addition, as noted earlier, 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.

#### 5A.4.2.3 COMMUNITY FACILITIES AND SERVICES

This section assesses whether the CBD Tolling Alternative would affect access to and operations of community facilities and services, including potential effects on the workforce for community facilities and services.

The analysis considers the effects of the following:

- Costs to community facilities and service providers that rely on vehicles traveling into and out of the Manhattan CBD
- Costs to people who visit community facilities in the Manhattan CBD
- Costs to the workers who drive to work at community facilities and services in the Manhattan CBD
- Changes in traffic patterns, including potential increases in traffic at some locations, which could affect emergency response times (a community service)

Each of these potential effects on community facilities and services is discussed in the following sections. In addition, **Chapter 17, “Environmental Justice,”** considers these effects on minority and low-income populations.

##### *Costs to Community Facilities and Services*

A variety of community facilities and services, such as food pantries and meal delivery services, religious facilities, cultural institutions, social service providers, and home healthcare providers, rely on vehicles to transport people, goods, services, supplies, or staff into and out of the Manhattan CBD. As noted in **Chapter 17, “Environmental Justice,”** and **Chapter 18, “Agency Coordination and Public Participation,”** during early public outreach for the Project in fall 2021, some members of the public raised concerns about the increased cost of travel for nonprofit social service providers that operate in the Manhattan CBD. If these community facilities and services are not exempt from paying the toll, or otherwise reimbursed, they would have to absorb the cost of the toll as part of their operating costs to the extent such funds are available or look for new sources of funding to offset these costs. This would be true for providers located within the Manhattan CBD that provide services to people outside of the Manhattan CBD and providers that are located outside the Manhattan CBD but provide services to Manhattan CBD residents. Increased transportation costs could adversely affect the operations of the service providers if the costs cannot be

absorbed or offset through the addition of new funding sources. The costs incurred by various community facilities and services because of the toll would depend on the type of vehicle, how frequently their vehicles need to enter and exit the Manhattan CBD, whether the service provider can consolidate activities or shift to off-peak or overnight hours, whether there is a cap on the number of times a toll can be charged, and other factors. (In all tolling scenarios, automobiles and small vans would pay the toll no more than once per day; some tolling scenarios would have a limit on the number of times per day a truck would pay the toll and others would not.) Tolling Scenarios B and F would result in lesser effects on services that provide or rely on truck deliveries since they limit the number of times a truck would be charged the CBD toll on a given day. At the same time, community facilities and services that rely on vehicle travel into and out of the Manhattan CBD would benefit from a less congested roadway network.

One example of a community service that may incur additional cost related to the toll is school bus service to and from school across the Manhattan CBD boundary at 60th Street. As described earlier, most students in Manhattan travel to and from school by walking, biking, or public transit. For the school bus operations that occur, the CBD Tolling Alternative would increase the cost of some bus services for NYCDOE if all school buses are not exempt from the toll. (Those school buses carrying students with disabilities would be exempt from the toll under the legislation that created the CBD Tolling Program.) The City of New York would need to set aside funding for this cost, competing with other resource needs.<sup>30</sup> Whether school buses receive an exemption or not, they would still benefit from reduced roadway congestion and additional funds to improve transit service used by their faculty, staff, and students.

### *Costs to People who Visit Community Facilities and Services*

Throughout the regional study area, most community facilities are locally focused, serving their individual communities, although some have a larger regional draw. 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 and, as noted earlier, most travel to and from the Manhattan CBD is by transit. The clientele who use transit would not have increased costs. There would be a cost with the CBD Tolling Alternative to people who drive to community facilities and services in the Manhattan CBD from outside the Manhattan CBD and also to residents of the Manhattan CBD who drive to community facilities outside the Manhattan CBD.

Examples of the type of community facility user who would be affected by the cost of the toll if they drive would be individuals traveling to medical or healthcare facilities, or potentially to a place of worship. These examples are discussed below. As noted in **Chapter 17, “Environmental Justice,”** and **Chapter 18, “Agency Coordination and Public Participation,”** members of the public raised the increased cost of travel for patients traveling to health care facilities in the Manhattan CBD as a concern during early public outreach conducted in fall 2021.

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<sup>30</sup> Private schools using buses that pay the CBD toll would have to absorb the costs or pass them on to their students if buses are tolled; in Tolling Scenarios B and F, school buses would be exempt from the toll and in the other tolling scenarios they would be subject to the toll with no cap or exemption.

As described earlier, the rate of vehicle use to access medical facilities depends in part on the facilities' distance to the subway or bus routes (as well as other factors, including the patient's mobility and the type of medical service sought). For medical office uses within one-quarter mile of a subway station, approximately 6 percent of trips to these uses are by auto or taxi/FHV modes, according to data from NYCDOT's mode choice surveys. For medical office uses that are beyond one-quarter mile from a subway station, approximately 14 percent of trips are by auto or taxi/FHV modes. Therefore, most medical trips, even those to facilities more than one-quarter mile from a subway station, are made by modes other than auto or taxi/FHV. With the CBD Tolling Alternative, people traveling to medical facilities in the Manhattan CBD would either continue to travel by vehicle and incur the toll, switch modes to transit to avoid the toll, or seek new medical and healthcare facilities outside of the Manhattan CBD. It may not be reasonable for some individuals to switch modes or seek new medical and healthcare providers. In that case, the CBD Tolling Alternative could increase the cost for certain individuals to access medical facilities and healthcare providers in the Manhattan CBD, depending on their route choice and the tolling scenario. It should be noted that qualifying vehicles—which would include MTA's paratransit service and taxis and FHVs that provide paratransit service on behalf of MTA—transporting people with disabilities would be exempt from the toll. Therefore, disabled people traveling by a qualifying vehicle to or within the Manhattan CBD would not be charged a toll. However, some disabled people may need to use nonqualifying vehicles to access healthcare and medical facilities. In those cases, the CBD Tolling Alternative would result in an additional cost for disabled individuals to access medical facilities and healthcare providers in the Manhattan CBD. Some of this cost may be covered by Medicaid or other insurance, which covers nonemergency medical transportation in certain situations.

The costs incurred by people driving to access medical or healthcare facilities would vary depending on individual circumstances. The greatest cost would be incurred by those who have frequent, regular medical appointments that they drive to (and for whom transit is not an acceptable alternative), and who are not eligible for paratransit or nonemergency medical transportation under Medicaid or other insurance coverage. 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 parking or taxi/FHV fares, and it is likely that people who drive regularly to medical appointments would have higher incomes. Individuals who drive infrequently to medical appointments would incur lower costs because of the toll. The increased cost would be partially offset by the travel-time savings provided by a potentially less congested roadway network.

With respect to people traveling to places of worship, as noted earlier, there are some 200 places of worship for many different religions in and around the Manhattan CBD, and some of these places are regionally important. Places of worship are typically accessible by transit, and most do not have on-site visitor parking given the densely developed nature of the Manhattan CBD, which indicates that travel by vehicle is not the predominant mode of transportation for their worshippers. With the CBD Tolling Alternative, individuals would incur an additional cost to travel by vehicle to a place of worship in the Manhattan CBD, or from within the Manhattan CBD to a place of worship outside the Manhattan CBD. The costs incurred by individuals driving to places of worship would vary depending on individual circumstances, as discussed earlier with respect to medical and healthcare facilities. Individuals who use the bus system would benefit from the reduced congestion with the CBD Tolling Alternative.

Overall, given the wide range of travel options other than driving, the cost for users to drive to community facilities and services would not constitute an adverse effect on the operations of community facilities and services.

### *Costs to Workers at Community Facilities and Services*

Workers at community facilities and services, such as teachers, police officers, or health care workers, may choose to commute by automobile to or from the Manhattan CBD because their work schedule is not conducive for transit use, because they have limited transit options to their place of work, or, in some cases, because they have free parking at their place of work. With the CBD Tolling Alternative, there would be a cost to workers associated with commuting by vehicle if they enter or remain in the Manhattan CBD.

As discussed in more detail in **Chapter 6, “Economic Conditions,”** as a result of the CBD Tolling Alternative, such workers would make one of the following decisions: (1) continue to commute by vehicle and incur the toll cost; (2) switch modes to a nonvehicular option before entering the Manhattan CBD to avoid the toll cost; (3) seek new employment opportunities (or other workplace locations with the same employer) at locations that would not involve incurring the toll; (4) relocate their place of residence to the Manhattan CBD; or (5) telecommute, or telecommute more often, to eliminate or reduce the frequency of incurring the toll. Workers that make decision (1), (2), (4), or (5) or seek other workplace locations with their same employer in decision (3) would continue employment at their respective community facility or service employer, and thus would not affect the provision of community facilities or services. These workers would not result in additional costs to their employers because they would either absorb or avoid the toll. It should be noted that decisions (4) and (5) may not be feasible for many workers at community facilities and services. For decision (4), the potential cost savings associated with eliminating a toll would be far outweighed by other cost-of-living and quality-of-life factors given the relatively high rents and home prices within the Manhattan CBD. For decision (5), telecommuting is not a viable option for many types of work, including many types of community facilities and services work.

Many workers at community facilities and services in the Manhattan CBD would have the option to switch from a vehicle to transit to their place of work because the Manhattan CBD is accessible by transit with a range of modes and service providers, including local and express subways, commuter and intercity rail, local and express buses, intercity buses, and ferries. As noted in **Chapter 6, “Economic Conditions,”** the ease of transit access within the Manhattan CBD allows the subset of Manhattan CBD car commuters who would be discouraged by toll costs and who do not have transit access near their homes, to instead drive to a transit station and complete their commute by transit. As noted earlier, all areas of the Manhattan CBD are within one-half mile of transit service, but one area in the West 50s is not within one-half mile of faster transit modes. As shown in **Table 6-11 in Chapter 6, “Economic Conditions,”** approximately 0.7 percent of all jobs (or 1,415 jobs) in the Manhattan CBD in the “Education, health, and social services” industry category and approximately 0.1 percent of all jobs (or 65 jobs) in the “Public administration,” industry category are located more than one-half mile from faster transit at a subway station or express/SBS bus stop. Furthermore, more than 85 percent of jobs in the Manhattan CBD are held by workers who commute by public transportation; approximately 9 percent of Manhattan CBD jobs are held by workers who drive to work alone.

To the extent that some community facilities and services workers who currently drive to work in the Manhattan CBD would seek new employment (i.e., decision (3) above), this would likely happen over time (for example, as people try new modes of transportation to avoid the toll and perhaps ultimately decide to take a new job elsewhere) such that services would be maintained and, if necessary, employers could elect to provide incentives (such as higher pay or reimbursements) to compensate for the cost of the toll to workers. The cost of higher pay for workers in the Manhattan CBD would increase operating costs for the community facility or service provider.

### ***Emergency Response Times***

The CBD Tolling Alternative would result in potential changes in traffic patterns, including potential increases in traffic at some locations, which could affect emergency response times. Shifts in traffic patterns would change conditions at some local intersections within and near the Manhattan CBD. Of the more than 102 local intersections analyzed, most intersections would see reductions in or no change in delay. At intersections where the CBD Tolling Alternative would result in increases in delay, the Project will include implementation of signal-timing adjustments to address that delay. Therefore, the increases in delays at local intersections would not adversely affect emergency response times.

Under Tolling Scenarios D, E, and F, the CBD Tolling Alternative would result in increased traffic volumes approaching the Manhattan CBD on the Long Island Expressway (I-495) leading to the Queens-Midtown Tunnel and the Trans-Manhattan Expressway (I-95) between the Alexander Hamilton Bridge and the George Washington Bridge during the midday and PM peak hours. Although there would be some increase in overall travel time at these locations under these tolling scenarios, emergency response vehicles are not bound by standard traffic controls when responding to emergencies and thus may be able to bypass some highway congestion. Therefore, the increased volumes on certain highway segments would not adversely affect emergency response times. The CBD Tolling Alternative would contribute to improved response times in the Manhattan CBD because it would reduce vehicular congestion in the Manhattan CBD.

#### **5A.4.2.4 EFFECTS ON VULNERABLE SOCIAL GROUPS**

This section evaluates the Project's potential effects on certain vulnerable social groups, including elderly populations, persons with disabilities, transit-dependent populations, and nondriver populations. The potential effects of the CBD Tolling Alternative on minority and/or low-income populations is evaluated in **Chapter 17, "Environmental Justice."**

This section draws on the summary of the potential benefits of the CBD Tolling Alternative provided earlier and includes subsections for each of the relevant social groups.

### ***Elderly Individuals***

The CBD Tolling Alternative would result in an additional cost to elderly individuals if they travel by auto and enter or remain in the Manhattan CBD. Some elderly people would shift to other modes to avoid the toll, while others would continue to drive and pay the toll, because it is worth the time savings, because they prefer traveling by car, or because they have limited transportation options. The majority (approximately 63 percent) of the approximately 105,000 people age 65 or older who commute to

Manhattan for work take public transit, while approximately 18 percent drive or travel by taxi or FHV.<sup>31</sup> No information is available about travel mode choices for elderly individuals traveling to the Manhattan CBD for non-work-related reasons. As noted in **Chapter 17, “Environmental Justice,”** and **Chapter 18, “Agency Coordination and Public Participation,”** members of the public raised the increased cost of travel for elderly individuals in the Manhattan CBD as a concern during early public outreach conducted in fall 2021.

The costs incurred by elderly individuals driving to the Manhattan CBD would vary depending on how frequently they choose to drive to the Manhattan CBD and at what time of day. As noted earlier, 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 taxi/FHV fares, and it is likely that people who drive frequently have higher incomes.<sup>32</sup> With the CBD Tolling Alternative, some elderly individuals would likely switch from vehicles to public transit for journeys to the Manhattan CBD, consistent with BPM data that indicate an overall reduction in driving mode share to the Manhattan CBD ranging from 4 percent (with Tolling Scenario B) to 10 percent (with Tolling Scenario E), or approximately 19,900 to 49,500 fewer daily driving journeys to the Manhattan CBD. **Table 4A-8** in **Subchapter 4A, “Transportation: Regional Transportation Effects and Modeling,”** provides more information on the predicted change in mode share to the Manhattan CBD.

There are various reasons that elderly people drive to the Manhattan CBD, including trips to work, trips to shop, dine, or attend a performance, trips to visit friends or family, and trips to community facilities, including medical appointments. There is a transit alternative to reach many destinations within the Manhattan CBD, including local buses that stop within a block or two of most destinations. People over the age of 65 with a qualifying disability receive a reduced fare on MTA subways and buses, and elderly individuals with a qualifying disability can also receive MTA’s paratransit service, including taxis and FHVs operating on behalf of MTA to transport paratransit users.<sup>33</sup> Elderly people who drive to or from the Manhattan CBD and are low-income would be entitled to the same mitigations and enhancements proposed for younger low-income populations with the CBD Tolling Alternative (see **Chapter 17, “Environmental Justice”**). Other elderly individuals who drive to the Manhattan CBD would pay the full toll.

Elderly individuals would benefit from the travel-time and reliability improvements to bus service with the CBD Tolling Alternative, as bus passengers tend to be older than riders on other forms of transit, such as the subway and, as described above, bus passengers in the Manhattan CBD would benefit from travel-time savings due to the decrease in congestion.<sup>34</sup>

### ***Persons with Disabilities***

With the CBD Tolling Alternative, qualifying vehicles transporting people with disabilities would be exempt from the toll. As currently designed, qualifying vehicles transporting persons with disabilities includes vehicles with government-issued disability license plates and fleet vehicles owned or operated by

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<sup>31</sup> Data on mode of travel to work by age to the Manhattan CBD is not available. Data is available only to the county level.

<sup>32</sup> FHWA. Status of the Nation’s Highways, Bridges, and Transit Conditions & Performance, 23rd Edition. Chapter 3, “Travel.” Last accessed March 21, 2022. <https://www.fhwa.dot.gov/policy/23cpr/chap3.cfm#access-to-vehicles>.

<sup>33</sup> MTA has specific criteria to define qualifying individuals: <https://new.mta.info/fares/reduced-fare> and <https://new.mta.info/accessibility/paratransit/how-to-apply-or-recertify-for-access-a-ride>.

<sup>34</sup> [blog.tstc.org/2014/04/11/nyc-bus-riders-tend-to-be-older-and-poorer-than-subway-riders/](http://blog.tstc.org/2014/04/11/nyc-bus-riders-tend-to-be-older-and-poorer-than-subway-riders/).

organizations used exclusively to provide transportation to people with disabilities. Therefore, disabled people traveling by a qualifying vehicle to or within the Manhattan CBD would not be charged a toll. Access-A-Ride paratransit service, which provides public transportation for customers with disabilities or certain qualifying health conditions, would be also exempt from the toll. Some disabled people may rely on travel by nonqualifying vehicles to or within the Manhattan CBD. In that case, the CBD Tolling Alternative would increase the cost for disabled people using nonqualifying vehicles to travel to the Manhattan CBD. As noted earlier, some of the cost to use nonqualifying vehicles for nonemergency medical transportation may be covered by Medicaid in certain situations. As noted in **Chapter 17, “Environmental Justice,”** and **Chapter 18, “Agency Coordination and Public Participation,”** members of the public raised the increased cost of travel for persons with disabilities in the Manhattan CBD as a concern during early public outreach conducted in fall 2021.

The CBD Tolling Alternative would provide benefits to improve paratransit services, such as reduced roadway congestion and travel-time improvements, which would benefit persons with disabilities.

Given the exemption from the toll for qualifying vehicles and the transit and paratransit service improvements, the CBD Tolling Alternative would not adversely affect persons with disabilities.

#### *Transit-Dependent Populations and Nondriver Populations*

The CBD Tolling Alternative would benefit transit users in the region, and transit-dependent populations in particular, by creating a new funding source for MTA’s 2020–2024 Capital Program and subsequent programs. As described earlier, the CBD Tolling Alternative would result in a mode shift to transit across the region, but this mode shift would not result in adverse effects to the capacity of transit services serving the Manhattan CBD (refer to **Subchapter 4C, “Transportation: Transit”**). Furthermore, the CBD Tolling Alternative would not have unmitigated adverse effects on pedestrian facilities (such as sidewalks and crosswalks) that nondriver populations may rely on, and would result in safety benefits for pedestrians and bicyclists as described earlier. Therefore, potential transit ridership increases due to the CBD Tolling Alternative would not adversely affect transit-dependent populations or nondriver populations.

#### **5A.4.2.5 ACCESS TO EMPLOYMENT**

This subsection evaluates the effects of the new CBD toll on access to employment, including for people who travel from elsewhere to jobs in the Manhattan CBD and for residents of the Manhattan CBD who travel to jobs outside the Manhattan CBD.

### *Changes to Daily Work Journeys to the Manhattan CBD*

**Table 5A-6** and **Table 5A-7** present the number of daily work journeys into the Manhattan CBD from each of the counties in the regional study area for each tolling scenario in comparison to the No Action Alternative. As shown, while the total number of daily work journeys would remain essentially the same (because the number of jobs would be unchanged; the small differences in total journeys are due to rounding in the model results), the distribution of the journeys would change with implementation of the CBD Tolling Alternative.

The CBD Tolling Alternative would result in small shifts in the place of origin for employees with jobs in the Manhattan CBD. More employees would come from New Jersey (a 1.3 to 2.9 percent increase, depending on the tolling scenario), Staten Island (a 2.3 to 3.7 percent increase depending on the tolling scenario), and Long Island (a 1.4 to 2.6 percent increase, depending on the tolling scenario). Fewer employees would come from New York counties north of New York City, with a decrease of 1.7 percent under Tolling Scenario A (a decrease of approximately 1,800 work journeys); Queens, with a decrease of 1.5 percent under Tolling Scenario F (decrease of approximately 3,800 work journeys); the Bronx (a decrease of 1.4 percent under Scenario E); and Brooklyn (a decrease of 1.2 percent under Tolling Scenario E). The largest percentage decrease in daily work journeys to the Manhattan CBD would occur from Connecticut, with a decrease of 2 percent under Tolling Scenario E (a decrease of approximately 1,100 work journeys). These decreases indicate a decrease in jobs held at locations inside the Manhattan CBD by residents of the Bronx, Brooklyn, and Queens; New York counties north of New York City; and Connecticut.

### *Change in Daily Work Journeys to Non-CBD Locations*

**Table 5A-8** and **Table 5A-9** show the projected change in daily work journeys to locations outside the Manhattan CBD for each county in the regional study area for each tolling scenario. Similar to the work journeys to the Manhattan CBD discussed above, the total number of daily work journeys to non-CBD locations would remain essentially the same (because the number of jobs would be unchanged; the small differences in total journeys are due to rounding in the model results), the distribution of the journeys would change with implementation of the CBD Tolling Alternative.

As shown, the modeling predicts that the number of Manhattan CBD residents who work outside the Manhattan CBD would decrease by up to 2.2 percent under the tolling scenario with the largest decrease (Tolling Scenario E, with a decrease of approximately 800 daily journeys). Specifically, with the No Action Alternative and all tolling scenarios of the CBD Tolling Alternative, approximately 37,000 daily work journeys would originate in the Manhattan CBD bound for locations outside the Manhattan CBD, compared to approximately 165,000 daily work journeys that would originate in the Manhattan CBD and remain there (see **Table 5A-6**). The reduction under Tolling Scenario E could be due to residents of the Manhattan CBD taking jobs within the Manhattan CBD vacated by non-Manhattan CBD residents who were working in the Manhattan CBD, but who took jobs outside of the Manhattan CBD to avoid the toll.



Table 5A-6. Daily Work Journeys into Manhattan CBD by County of Origin (2023, All Modes)

ORIGIN GEOGRAPHIC AREA	NO ACTION	SCENARIO A	SCENARIO B	SCENARIO C	SCENARIO D	SCENARIO E	SCENARIO F	SCENARIO G
<b>New York City</b>	<b>1,008,469</b>	<b>1,004,181</b>	<b>1,003,479</b>	<b>1,002,771</b>	<b>1,001,411</b>	<b>1,000,751</b>	<b>1,001,246</b>	<b>1,002,600</b>
Bronx	97,518	96,911	96,821	96,598	96,359	96,172	96,741	96,409
Kings (Brooklyn)	282,439	280,663	280,595	279,906	279,684	279,165	280,197	280,463
New York (Manhattan)	340,690	339,782	340,032	339,874	340,036	340,401	339,459	339,300
Inside Manhattan CBD <sup>1</sup>	164,814	165,096	164,894	165,304	165,480	165,649	165,289	165,093
Outside Manhattan CBD	175,876	174,686	175,138	174,570	174,556	174,752	174,170	174,207
Queens	260,444	258,756	257,996	257,996	257,335	256,897	256,624	258,367
Richmond (Staten Island)	27,378	28,069	28,035	28,397	27,997	28,116	28,225	28,061
<b>Long Island Counties<sup>2</sup></b>	<b>128,802</b>	<b>131,412</b>	<b>131,993</b>	<b>131,253</b>	<b>131,272</b>	<b>131,777</b>	<b>130,636</b>	<b>132,202</b>
<b>New York Counties North of New York City<sup>3</sup></b>	<b>101,745</b>	<b>99,988</b>	<b>100,411</b>	<b>100,742</b>	<b>100,272</b>	<b>100,014</b>	<b>100,247</b>	<b>100,347</b>
<b>New Jersey Counties<sup>4</sup></b>	<b>264,412</b>	<b>268,175</b>	<b>267,738</b>	<b>269,024</b>	<b>271,000</b>	<b>272,034</b>	<b>271,413</b>	<b>269,303</b>
<b>Connecticut Counties<sup>5</sup></b>	<b>57,639</b>	<b>57,274</b>	<b>57,394</b>	<b>57,303</b>	<b>57,085</b>	<b>56,505</b>	<b>57,517</b>	<b>56,565</b>
<b>TOTAL</b>	<b>1,561,067</b>	<b>1,561,030</b>	<b>1,561,015</b>	<b>1,561,093</b>	<b>1,561,040</b>	<b>1,561,081</b>	<b>1,561,059</b>	<b>1,561,017</b>

Source: BPM, WSP 2021.

<sup>1</sup> Journeys originating in the Manhattan CBD are internal journeys within the Manhattan CBD.<sup>2</sup> Long Island counties include Nassau and Suffolk.<sup>3</sup> New York counties north of New York City include Dutchess, Orange, Putnam, Rockland, and Westchester.<sup>4</sup> New Jersey counties include Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union, and Warren.<sup>5</sup> Connecticut counties include Fairfield and New Haven.

Table 5A-7. Change in Daily Work Journeys into Manhattan CBD Compared to No Action Alternative (2023, All Modes)

ORIGIN GEOGRAPHIC AREA	SCENARIO A		SCENARIO B		SCENARIO C		SCENARIO D		SCENARIO E		SCENARIO F		SCENARIO G	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
<b>New York City</b>	<b>-4,288</b>	<b>-0.4%</b>	<b>-4,990</b>	<b>-0.5%</b>	<b>-5,698</b>	<b>-0.6%</b>	<b>-7,058</b>	<b>-0.7%</b>	<b>-7,718</b>	<b>-0.8%</b>	<b>-7,223</b>	<b>-0.7%</b>	<b>-5,869</b>	<b>-0.6%</b>
Bronx	-607	-0.6%	-697	-0.7%	-920	-0.9%	-1,159	-1.2%	-1,346	-1.4%	-777	-0.8%	-1,109	-1.1%
Kings (Brooklyn)	-1,776	-0.6%	-1,844	-0.7%	-2,533	-0.9%	-2,755	-1.0%	-3,274	-1.2%	-2,242	-0.8%	-1,976	-0.7%
New York (Manhattan)	-908	-0.3%	-658	-0.2%	-816	-0.2%	-654	-0.2%	-289	-0.1%	-1,231	-0.4%	-1,390	-0.4%
Manhattan CBD <sup>1</sup>	282	0.2%	80	0.0%	490	0.3%	666	0.4%	835	0.5%	475	0.3%	279	0.2%
Outside Manhattan CBD	-1,190	-0.7%	-738	-0.4%	-1,306	-0.7%	-1,320	-0.8%	-1,124	-0.6%	-1,706	-1.0%	-1,669	-0.9%
Queens	-1,688	-0.6%	-2,448	-0.9%	-2,448	-0.9%	-3,109	-1.2%	-3,547	-1.4%	-3,820	-1.5%	-2,077	-0.8%
Richmond (Staten Island)	691	2.5%	657	2.4%	1,019	3.7%	619	2.3%	738	2.7%	847	3.1%	683	2.5%
<b>Long Island Counties<sup>2</sup></b>	<b>2,610</b>	<b>2.0%</b>	<b>3,191</b>	<b>2.5%</b>	<b>2,451</b>	<b>1.9%</b>	<b>2,470</b>	<b>1.9%</b>	<b>2,975</b>	<b>2.3%</b>	<b>1,834</b>	<b>1.4%</b>	<b>3,400</b>	<b>2.6%</b>
<b>New York Counties North of New York City<sup>3</sup></b>	<b>-1,757</b>	<b>-1.7%</b>	<b>-1,334</b>	<b>-1.3%</b>	<b>-1,003</b>	<b>-1.0%</b>	<b>-1,473</b>	<b>-1.4%</b>	<b>-1,731</b>	<b>-1.7%</b>	<b>-1,498</b>	<b>-1.5%</b>	<b>-1,398</b>	<b>-1.4%</b>
<b>New Jersey Counties<sup>4</sup></b>	<b>3,763</b>	<b>1.4%</b>	<b>3,326</b>	<b>1.3%</b>	<b>4,612</b>	<b>1.7%</b>	<b>6,588</b>	<b>2.5%</b>	<b>7,622</b>	<b>2.9%</b>	<b>7,001</b>	<b>2.6%</b>	<b>4,891</b>	<b>1.8%</b>
<b>Connecticut Counties<sup>5</sup></b>	<b>-365</b>	<b>-0.6%</b>	<b>-245</b>	<b>-0.4%</b>	<b>-336</b>	<b>-0.6%</b>	<b>-554</b>	<b>-1.0%</b>	<b>-1,134</b>	<b>-2.0%</b>	<b>-122</b>	<b>-0.2%</b>	<b>-1,074</b>	<b>-1.9%</b>
<b>TOTAL</b>	<b>-37</b>	<b>0.0%</b>	<b>-52</b>	<b>0.0%</b>	<b>26</b>	<b>0.0%</b>	<b>-27</b>	<b>0.0%</b>	<b>14</b>	<b>0.0%</b>	<b>-8</b>	<b>0.0%</b>	<b>-50</b>	<b>0.0%</b>

Source: BPM, WSP 2021.

<sup>1</sup> Journeys originating in the CBD are internal journeys within the Manhattan CBD.<sup>2</sup> Long Island counties include Nassau and Suffolk.<sup>3</sup> New York counties north of New York City include Dutchess, Orange, Putnam, Rockland, and Westchester.<sup>4</sup> New Jersey counties include Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union, and Warren.<sup>5</sup> Connecticut counties include Fairfield and New Haven.

Table 5A-8. Daily Work Journeys to Non-CBD Locations by County of Origin (2023, All Modes)

ORIGIN GEOGRAPHIC AREA	NO ACTION	SCENARIO A	SCENARIO B	SCENARIO C	SCENARIO D	SCENARIO E	SCENARIO F	SCENARIO G
<b>New York City</b>	<b>1,807,303</b>	<b>1,811,591</b>	<b>1,812,293</b>	<b>1,813,001</b>	<b>1,814,361</b>	<b>1,815,021</b>	<b>1,814,526</b>	<b>1,813,172</b>
Bronx	320,338	320,945	321,035	321,258	321,497	321,684	321,115	321,447
Kings (Brooklyn)	587,782	589,558	589,626	590,315	590,537	591,056	590,024	589,758
New York (Manhattan)	154,301	155,209	154,959	155,117	154,955	154,590	155,532	155,691
Inside Manhattan CBD <sup>1</sup>	37,457	37,175	37,377	36,967	36,791	36,622	36,982	37,178
Outside Manhattan CBD	116,844	118,034	117,582	118,150	118,164	117,968	118,550	118,513
Queens	620,209	621,897	622,657	622,657	623,318	623,756	624,029	622,286
Richmond (Staten Island)	124,673	123,982	124,016	123,654	124,054	123,935	123,826	123,990
<b>Long Island Counties<sup>2</sup></b>	<b>1,008,938</b>	<b>1,006,328</b>	<b>1,005,747</b>	<b>1,006,487</b>	<b>1,006,468</b>	<b>1,005,963</b>	<b>1,007,104</b>	<b>1,005,538</b>
<b>New York Counties North of New York City<sup>3</sup></b>	<b>658,523</b>	<b>660,280</b>	<b>659,857</b>	<b>659,526</b>	<b>659,996</b>	<b>660,254</b>	<b>660,021</b>	<b>659,921</b>
<b>New Jersey Counties<sup>4</sup></b>	<b>2,416,474</b>	<b>2,412,711</b>	<b>2,413,148</b>	<b>2,411,862</b>	<b>2,409,886</b>	<b>2,408,852</b>	<b>2,409,473</b>	<b>2,411,583</b>
<b>Connecticut Counties<sup>5</sup></b>	<b>644,072</b>	<b>644,437</b>	<b>644,317</b>	<b>644,408</b>	<b>644,626</b>	<b>645,206</b>	<b>644,194</b>	<b>645,146</b>
<b>TOTAL</b>	<b>6,535,310</b>	<b>6,535,347</b>	<b>6,535,362</b>	<b>6,535,284</b>	<b>6,535,337</b>	<b>6,535,296</b>	<b>6,535,318</b>	<b>6,535,360</b>

Source: BPM, WSP 2021.

<sup>1</sup> Journeys originating in the Manhattan CBD are internal journeys within the Manhattan CBD.<sup>2</sup> Long Island counties include Nassau and Suffolk.<sup>3</sup> New York counties north of New York City include Dutchess, Orange, Putnam, Rockland, and Westchester.<sup>4</sup> New Jersey counties include Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union, and Warren.<sup>5</sup> Connecticut counties include Fairfield and New Haven.

Table 5A-9. Change in Daily Work Journeys to Non-CBD Locations Compared to No Action Alternative (2023, All Modes)

ORIGIN GEOGRAPHIC AREA	SCENARIO A		SCENARIO B		SCENARIO C		SCENARIO D		SCENARIO E		SCENARIO F		SCENARIO G	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
<b>New York City</b>	<b>4,288</b>	<b>0.2%</b>	<b>4,990</b>	<b>0.3%</b>	<b>5,698</b>	<b>0.3%</b>	<b>7,058</b>	<b>0.4%</b>	<b>7,718</b>	<b>0.4%</b>	<b>7,223</b>	<b>0.4%</b>	<b>5,869</b>	<b>0.3%</b>
Bronx	607	0.2%	697	0.2%	920	0.3%	1,159	0.4%	1,346	0.4%	777	0.2%	1,109	0.3%
Kings (Brooklyn)	1,776	0.3%	1,844	0.3%	2,533	0.4%	2,755	0.5%	3,274	0.6%	2,242	0.4%	1,976	0.3%
New York (Manhattan)	908	0.6%	658	0.4%	816	0.5%	654	0.4%	289	0.2%	1,231	0.8%	1,390	0.9%
Inside Manhattan CBD <sup>1</sup>	-282	-0.8%	-80	-0.2%	-490	-1.3%	-666	-1.8%	-835	-2.2%	-475	-1.3%	-279	-0.7%
Outside Manhattan CBD	1,190	1.0%	738	0.6%	1,306	1.1%	1,320	1.1%	1,124	1.0%	1,706	1.5%	1,669	1.4%
Queens	1,688	0.3%	2,448	0.4%	2,448	0.4%	3,109	0.5%	3,547	0.6%	3,820	0.6%	2,077	0.3%
Richmond (Staten Island)	-691	-0.6%	-657	-0.5%	-1,019	-0.8%	-619	-0.5%	-738	-0.6%	-847	-0.7%	-683	-0.5%
<b>Long Island Counties<sup>2</sup></b>	<b>-2,610</b>	<b>-0.3%</b>	<b>-3,191</b>	<b>-0.3%</b>	<b>-2,451</b>	<b>-0.2%</b>	<b>-2,470</b>	<b>-0.2%</b>	<b>-2,975</b>	<b>-0.3%</b>	<b>-1,834</b>	<b>-0.2%</b>	<b>-3,400</b>	<b>-0.3%</b>
<b>New York Counties North of New York City<sup>3</sup></b>	<b>1,757</b>	<b>0.3%</b>	<b>1,334</b>	<b>0.2%</b>	<b>1,003</b>	<b>0.2%</b>	<b>1,473</b>	<b>0.2%</b>	<b>1,731</b>	<b>0.3%</b>	<b>1,498</b>	<b>0.2%</b>	<b>1,398</b>	<b>0.2%</b>
<b>New Jersey Counties<sup>4</sup></b>	<b>-3,763</b>	<b>-0.2%</b>	<b>-3,326</b>	<b>-0.1%</b>	<b>-4,612</b>	<b>-0.2%</b>	<b>-6,588</b>	<b>-0.3%</b>	<b>-7,622</b>	<b>-0.3%</b>	<b>-7,001</b>	<b>-0.3%</b>	<b>-4,891</b>	<b>-0.2%</b>
<b>Connecticut Counties<sup>5</sup></b>	<b>365</b>	<b>0.1%</b>	<b>245</b>	<b>0.0%</b>	<b>336</b>	<b>0.1%</b>	<b>554</b>	<b>0.1%</b>	<b>1,134</b>	<b>0.2%</b>	<b>122</b>	<b>0.0%</b>	<b>1,074</b>	<b>0.2%</b>
<b>TOTAL</b>	<b>37</b>	<b>0.0%</b>	<b>52</b>	<b>0.0%</b>	<b>-26</b>	<b>0.0%</b>	<b>27</b>	<b>0.0%</b>	<b>-14</b>	<b>0.0%</b>	<b>8</b>	<b>0.0%</b>	<b>50</b>	<b>0.0%</b>

Source: BPM, WSP 2021.

<sup>1</sup> Journeys originating in the Manhattan CBD are internal journeys within the Manhattan CBD.<sup>2</sup> Long Island counties include Nassau and Suffolk.<sup>3</sup> New York counties north of New York City include Dutchess, Orange, Putnam, Rockland, and Westchester.<sup>4</sup> New Jersey counties include Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union, and Warren.<sup>5</sup> Connecticut counties include Fairfield and New Haven.

Work journeys originating in Manhattan north of 60th Street and bound for locations other than the Manhattan CBD would increase by approximately 1 percent compared to the No Action Alternative under all tolling scenarios. Similarly, work journeys from Brooklyn, Queens, and the Bronx to non-CBD locations would increase slightly under all tolling scenarios compared to the No Action Alternative. As noted previously, the BPM assumes regional employment would stay the same under the No Action Alternative and the CBD Tolling Alternative. Thus, the increases in work journeys to non-CBD locations from Manhattan north of 60th Street, Brooklyn, Queens, and the Bronx would directly offset (in terms of number of journeys) the decreases in work journeys to the Manhattan CBD shown in **Table 5A-7**. Likewise, the decreases in daily work journeys to locations outside of the Manhattan CBD originating in New Jersey or Long Island under each tolling scenario would be directly offset by the increases in work journeys to the Manhattan CBD shown in **Table 5A-7**.

### *Potential Effects on Access to Employment*

Approximately 1.4 million daily work journeys would travel into the Manhattan CBD from outside the CBD under any tolling scenario (see **Table 4A.2-10** in **Appendix 4A.2, “Transportation: Travel Forecast Scenario Summaries and Detailed Tables,”** and approximately 17 percent of these work journeys would be by driving (either the drive alone, high-occupancy vehicle, or taxi/FHV modes) compared to approximately 18 percent under the No Action Alternative. Although the share of total work journeys by driving would be similar under the No Action Alternative and CBD Tolling Alternative, the number of work journeys by driving modes to and within the Manhattan CBD would decrease by 4 to 10 percent (or 11,800 to 27,000 fewer driving journeys), depending on the tolling scenario (see **Table 6-23** in **Chapter 6, “Economic Conditions”**). Many of these workers, particularly those coming from other areas of New York City, would have transit access to the Manhattan CBD, but they might choose to drive despite the Manhattan CBD toll (for example, because they value the travel-time savings and convenience of driving, or they have work hours that are less conducive for transit).

As noted previously and shown in **Figure 5A-3**, a small portion of New York City does not have convenient access to faster transit modes (commuter rail, subway, or express bus/SBS bus service), although all of the city other than one neighborhood is within one-half mile of transit including local bus service. Approximately 5,200 people currently commute to the Manhattan CBD by car from these areas; as discussed previously, these car commuters are widely distributed throughout the city. For workers in these areas, some commuters could choose to drive instead to a transit hub if parking is available there (see **Subchapter 4D, “Transportation: Parking”**), and others could opt to use local bus service to access commuter rail, subway, or express bus/SBS service. As noted previously, the CBD Tolling Alternative would also result in beneficial effects from the reduction in VMT and enhanced mobility that would result from reduced congestion, which would potentially offset the negative effect of increasing the cost of driving to the Manhattan CBD.

In addition, with the CBD Tolling Alternative, some car commuters with destinations outside the Manhattan CBD who use routes that pass through the Manhattan CBD to their destinations might choose a different route to avoid the CBD toll. This routing decision would be based on consideration of the cost of the toll versus the cost of the alternative routing, which could be a longer distance or more time-consuming. These

commuters would still reach their destination and some drivers might use a different route than they do today. With the CBD Tolling Alternative, the number of work journeys to the Manhattan CBD originating from New Jersey and Long Island is projected to increase, and those bound for the Manhattan CBD from Brooklyn, Queens, the Bronx, and Manhattan outside the Manhattan CBD are projected to decrease. These decreases in work journeys to the Manhattan CBD are projected to be offset by increases in work journeys to non-CBD locations, which suggests that the CBD Tolling Alternative would result in small shifts in employment patterns (i.e., generally a change of 2 percent or less as shown in **Table 5A-7**). Furthermore, the regional study area has a dynamic economy with many employment opportunities across the region. Of the region's total employment of approximately 10.7 million jobs, 1.5 million are in the Manhattan CBD. This demonstrates that ample employment opportunities exist outside the Manhattan CBD for those who choose not to travel to the Manhattan CBD for work.

With respect to Manhattan CBD reverse commuters, the BPM results indicate that, in the aggregate, approximately 37,000 daily work journeys would originate in the Manhattan CBD bound for locations outside the Manhattan CBD with both the No Action Alternative and the CBD Tolling Alternative in all tolling scenarios, and approximately 31 percent to 33 percent of these work journeys (or 11,600 to 12,200) would be by the drive alone, high-occupancy vehicle, or taxi/FHV modes to places of work outside the Manhattan CBD under any tolling scenario, compared to 33 percent with the No Action Alternative. In the tolling scenario with the greatest change in work journeys made to places of work outside the Manhattan CBD (Tolling Scenario E, with a decrease of 835 journeys), the CBD Tolling Alternative would result in up to a 2.2 percent decrease in the number of work journeys from the Manhattan CBD to locations outside the Manhattan CBD compared to the No Action Alternative, which indicates a small effect on overall employment access for residents of the Manhattan CBD. This indicates the small likelihood that Manhattan CBD residents would change job locations from someplace outside the Manhattan CBD to a location within the Manhattan CBD because of the CBD Tolling Alternative. Most Manhattan CBD residents that currently work outside the Manhattan CBD would continue to do so as a result of the CBD Tolling Alternative.

Overall, the CBD Tolling Alternative would not adversely affect access to employment for residents of the regional study area and would not adversely affect social groups or population characteristics of the regional study area. Commuters who travel (by any mode) to, from, or within the Manhattan CBD to access employment would benefit from the reduced congestion resulting from the CBD Tolling Alternative. Furthermore, by creating a new funding source for the MTA 2020–2024 Capital Program and subsequent capital programs, the CBD Tolling Alternative would benefit commuters who use MTA transit services to access employment.

## 5A.5 CONCLUSION

Transportation users in the region would benefit from the CBD Tolling Alternative through travel-time savings, improved travel-time reliability, reduced vehicle operating costs, improved safety, reduced air pollutant emissions, and a predictable funding source for transit improvements. This would positively affect community connections and access to employment, education, healthcare, and recreation for residents.

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. Even with the robust transit accessibility between the Manhattan CBD, New York City, and the regional study area, however, some people would continue to drive to the Manhattan CBD with the new CBD toll in place. The costs incurred by individuals driving to 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, and it is likely that people who drive regularly have higher incomes. Individuals who drive less frequently would incur lower costs because of the toll. Since the majority of trips to and from the Manhattan CBD are made by transit, most people would not be affected, and community cohesion would not be adversely affected.

The CBD Tolling Alternative does not require the acquisition of any private property or occupied structure and therefore would not result in direct residential displacement. Given the myriad of factors that influence real estate costs in the region, the new CBD toll would not have a substantial effect on housing values either in the Manhattan CBD or in other residential neighborhoods near transit. As a result, indirect displacement resulting from the CBD Tolling Alternative would not occur.

Throughout the region, most community facilities and services serve their individual communities and, as a result, the potential effects of the Project on local community facilities would be limited. Nonetheless, a variety of community facilities and services, such as food pantries and meal delivery services, religious facilities, cultural institutions, social service providers, and home healthcare providers, rely on vehicles to transport people, goods, services, supplies, or staff into and out of the Manhattan CBD. Community service providers that are not exempt from the toll and do not have other travel options would have to absorb the cost of the toll. Given the wide range of travel options other than driving, the cost for users to drive to community facilities and services would not constitute an adverse effect on community facilities and services. Workers at community facilities and services, such as teachers, police officers, or health care workers, who currently choose to commute by automobile to or from the Manhattan CBD would have a new cost that may or may not be reimbursed by their employer, but most of these workers have the option to switch from a personal vehicle to transit to their place of work.

The CBD Tolling Alternative would result in potential changes in traffic patterns, including potential increases in traffic at some location. The analysis concludes that neither the increases in delay at local intersections nor the increased volume on certain highway segments would adversely affect emergency response times.

The CBD Tolling Alternative would result in an additional cost to elderly individuals if they travel by auto to and from the Manhattan CBD. Some elderly people would shift to other modes to avoid the toll. Elderly people with a qualifying disability could receive reduced fares on MTA subways and buses or could qualify for MTA paratransit services, which are exempt from the toll. Low-income elderly individuals would benefit from the mitigation measures and enhancements identified for low-income drivers in general.

With the CBD Tolling Alternative, qualifying vehicles transporting people with disabilities would be exempt from the toll, as would paratransit service. Some disabled people may rely on travel by nonqualifying vehicles to or within the Manhattan CBD, and in that case, the CBD Tolling Alternative would increase the cost for those disabled people.

The CBD Tolling Alternative would impose tolls on vehicles entering or remaining in the Manhattan CBD, which could affect individuals who currently drive to work. The number of work trips by driving modes to and within the Manhattan CBD would decrease with the Project, with an offsetting increase in transit travel. Those who continue to drive despite the CBD toll would do so based on the need or convenience of driving and would benefit from the reduced congestion in the Manhattan CBD. Some workers may also choose to forego their work trip to the Manhattan CBD and find other employment and other workers would choose to take on those jobs. The regional study area has a dynamic economy with many employment opportunities spread across the region. Overall, the CBD Tolling Alternative would not adversely affect access to employment for residents of the regional study area.

**Table 5A-10** provides a summary of the effects of the CBD Tolling Alternative related to population characteristics and community cohesion.



Table 5A-10. Summary of Effects of the CBD Tolling Alternative on Population Characteristics and Community Cohesion

TOPIC	SUMMARY OF EFFECTS	EFFECT FOR ALL TOLLING SCENARIOS	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
Benefits	Benefits in and near the Manhattan CBD	Benefits in and near the Manhattan CBD related to travel-time savings, improved travel-time reliability, reduced vehicle operating costs, improved safety, reduced air pollutant emissions, and predictable funding source for transit improvements. This would positively affect community connections and access to employment, education, healthcare, and recreation for residents.	No	<b>No mitigation needed.</b> Beneficial effects
Community Cohesion	Changes to travel patterns, including increased use of transit, resulting from new toll	Changes to travel patterns, including increased use of transit, as a result of the Project would not adversely affect community cohesion or make it more difficult for people to connect with others in their community, given the extensive transit network connecting to the Manhattan CBD and the small change in trips predicted.	No	<b>No mitigation needed.</b> No adverse effects. See <b>Chapter 17, "Environmental Justice,"</b> for mitigation related to increased costs for low-income drivers.
Indirect Displacement	No notable changes in socioeconomic conditions or cost of living so as to induce potential involuntary displacement of residents in the Manhattan CBD	The Project would not result in the potential for indirect (involuntary) residential displacement. It would not result in substantial changes to market conditions so as to lead to changes in housing prices, given that real estate values in the Manhattan CBD are already high and the many factors that affect each household's decisions about where to live. In addition, low-income residents of the CBD would not experience a notable increase in the cost of living as a result of the Project because of the lack of change in housing costs, the many housing units protected through New York's rent-control, rent-stabilization, and other similar programs, the tax credit available to CBD residents with incomes of up to \$60,000, and the conclusion that the cost of goods would not increase as a result of the Project).	No	<b>No mitigation needed.</b> No adverse effects
Community Facilities and Services	Increased cost for community facilities and service providers in the Manhattan CBD, their employees who drive, and clientele who drive from outside the CBD	The Project would increase costs for community service providers that operate vehicles into and out of the Manhattan CBD and for people who travel by vehicle to community facilities and services in the Manhattan CBD, as well as residents of the CBD and employees of community facilities who use vehicles to travel to community facilities outside the CBD. Given the wide range of travel options other than driving, the cost for users to drive to community facilities and services would not constitute an adverse effect on community facilities and services.	No	<b>No mitigation needed.</b> No adverse effects

TOPIC	SUMMARY OF EFFECTS	EFFECT FOR ALL TOLLING SCENARIOS	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
Effects on Vulnerable Social Groups	Benefits to vulnerable social groups from new funding for MTA Capital Program	<p>The Project would benefit certain vulnerable social groups, including elderly populations, persons with disabilities, transit-dependent populations, and non-driver populations by creating a funding source for the MTA 2020–2024 Capital Program (and subsequent capital programs and by reducing congestion in the Manhattan CBD).</p> <p>Elderly individuals would benefit from the travel-time and reliability improvements to bus service with the CBD Tolling Alternative, as bus passengers tend to be older than riders on other forms of transit, such as the subway and, as described above, bus passengers in the Manhattan CBD would benefit from travel-time savings due to the decrease in congestion.</p> <p>People over the age of 65 with a qualifying disability receive a reduced fare on MTA subways and buses, and elderly individuals with a qualifying disability can also receive MTA’s paratransit service, including taxis and FHV’s operating on behalf of MTA to transport paratransit users. Elderly people with disabilities and low-income individuals who drive to the Manhattan CBD would be entitled to the same mitigation and enhancements proposed for low-income and disabled populations, in general (see Table 161). Other elderly individuals who drive to the Manhattan CBD would pay the toll.</p>	No	<b>No mitigation needed.</b> No adverse effects
Access to Employment	Increased cost for small number of people who drive to work in the Manhattan CBD	Decrease in work trips by driving modes to and within the Manhattan CBD, with an offsetting increase in transit ridership. Those who would drive despite the CBD toll would do so based on the need or convenience of driving and would benefit from the reduced congestion in the Manhattan CBD. Negligible effect (less than 0.1%) on travel to employment within the Manhattan CBD and reverse-commuting from the CBD due to the wide range of transit options available and the small number of commuters who drive today.	No	<b>No mitigation needed.</b> No adverse effects