

ENVIRONMENTAL ASSESSMENT

Executive Summary

August 2022

Federal Lead Agency



U.S. Department of Transportation

Federal Highway Administration

Project Sponsors



NEW YORK STATE OF OPPORTUNITY.

Department of Transportation





The translation of the Executive Summary from the official English version into any other language is for the sole purpose of facilitating participation during the public comment period by persons of Limited English Proficiency (LEP) or those who prefer to read the document in their native language.

TABLE OF CONTENTS

WHAT IS THE CENTRAL BUSINESS DISTRICT TOLLING PROGRAM?	ES-1
Where is the Project proposed?	ES-1
How do people and goods get to and move around in the Manhattan CBD today?	
Where will the benefits and effects of the Project occur?	ES-2
What is an Environmental Assessment (EA) and why is it needed for this Project?	ES-3
WHY IS THE CBD TOLLING PROGRAM BEING CONSIDERED?	ES-4
PROJECT PURPOSE, NEED, AND OBJECTIVES	ES-5
Why do we need to reduce traffic congestion?	ES-5
Why do we need money for transit investment?	ES-5
What are the Project objectives?	ES-6
WHAT ARE THE PROJECT ALTERNATIVES?	ES-7
No Action Alternative	ES-7
CBD Tolling Alternative (Action Alternative)	ES-10
Beneficial and Adverse Effects: What is important to know about the tolling scenarios	FC 40
in the CBD Tolling Alternative?	
Time of Day	
HOW DOES THE ACTION ALTERNATIVE MEET THE PROJECT OBJECTIVES?	ES-13
What are the effects of the Project?	ES-13
What are the effects of the Project on environmental justice populations?	
Low-Income Drivers	
Taxis and FHVs	
How has the public been involved?	
Environmental Justice Technical Advisory Group	
Environmental Justice Stakeholder Working Group	
WHAT ARE THE PROJECT'S EFFECTS TO SECTION 4(f) PROPERTIES?	ES-31
Figures	
Figure ES-1 The 28-Country Region Study Area	ES-1
Figure ES-2 People Entering Manhattan CBD (by mode)	
Figure ES-3 Most Congested Urban Areas (2021)	
Figure ES-4 Resource Areas and Effects Assessed in the EA	ES-14
Tables	
Table ES-1 Results of Preliminary Alternatives Screening	FS-8
Table ES-2 Tolling Scenarios Evaluated for the CBD Tolling Alternative	
Table ES-3 Comparison of Evaluation Results for the No Action and CBD Tolling (Action) Alternation	
Table ES-4 Summary of Benefits and Effects for the CBD Tolling Alternative	

The Executive Summary of the Environmental Assessment (EA) for the Central Business District (CBD) Tolling Program (the Project) presents a high-level summary of the Project, which includes

- The Purpose, Need, and Objectives of the Project
- The Alternatives
- Project Effects
- Key Findings

Additional details related to the information in this Executive Summary may be found in the relevant chapters and appendices of the EA.

WHAT IS THE CENTRAL BUSINESS DISTRICT TOLLING PROGRAM?

The Triborough Bridge and Tunnel Authority (TBTA) – an affiliate of the Metropolitan Transportation Authority (MTA) – the New York State Department of Transportation (NYSDOT),

and the New York City Department of Transportation (NYCDOT) (collectively, the Project Sponsors) are proposing the **Central Business District (CBD) Tolling Program** (the Project). The Project, a type of congestion pricing, would toll vehicles that enter or remain in the Manhattan CBD in order to reduce traffic congestion and generate revenue to fund \$15 billion to improve subway, bus, and commuter rail systems in MTA's 2020–2024 Capital Plan or successor plans.

Where is the Project proposed?

The Manhattan CBD consists of the geographic area of Manhattan south of and inclusive of 60th Street, not including the Franklin D. Roosevelt (FDR) Drive and the West Side Highway/Route 9A, the Battery Park Underpass and any surface roadway portion of the Hugh L. Carey Tunnel that connects to West Street (the West Side Highway/Route 9A).

The Manhattan CBD is the commercial center of a large metropolitan region of 28 counties in New York, New Jersey, and Connecticut that surrounds and includes New York City (Figure ES-1). Together these 28 counties are home to 22.2 million residents and more than 10.7 million jobs. making it the largest and most economically significant metropolitan region in the United States.

Figure ES-1. The 28-County Region Study Area



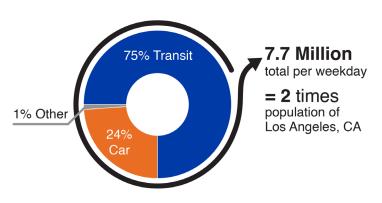
Source: ESRI, NYC Open Data, NYMTC 2020 TransCAD Highway

New York City alone contains roughly 4.6 million (43 percent) of the region's jobs and 8.4 million (38 percent) of the region's population. The Manhattan CBD hosts 1.5 million jobs, 450 million square feet of office space, and more than 617,000 residents. It is also a regional and national destination for commerce, entertainment, and tourism. **Chapter 1**, "Introduction" provides more information about the Project's setting.

How do people and goods get to and move around in the Manhattan CBD today?

Manhattan is connected to the rest of the region by twenty vehicular bridges and tunnels, the nation's three largest commuter railroads, the largest subway system, and two of the five largest bus transit systems in the United States,³ as well as public and private ferry service, and tram service. Much of the public transportation operates 24 hours per day/7 days per week/365 days per year. **Chapter 4, "Transportation," Subchapter 4B, "Transportation: Highways and Local Intersections," and Subchapter 4C, "Transportation: Transit"** provide detail on the region's highway, roadway, and transit systems.

Figure ES-2. People Entering Manhattan CBD (by mode)



Source: NYMTC Hub Bound Travel Data Report, 2019

People traveling to the Manhattan CBD arrive by public transportation (rail, subway, bus, tram, ferry, and paratransit), walk or ride a bicvcle. or travel passenger car, taxi, for-hire vehicle (FHV), or truck. Public transportation is used by most people to enter the Manhattan CBD, both for work and for leisure. According to the New York Metropolitan Transportation Council (NYMTC) Bound Travel Data Report.

approximately 7,665,000 people entered and exited the Manhattan CBD on an average weekday in 2019, nearly twice the population of Los Angeles, California (**Figure ES-2**).⁴ Seventy-five percent of these trips were made by transit, but an estimated 1,856,000 (24 percent) were made by car, taxi, van, or truck.⁵

Where will the benefits and effects of the Project occur?

The 28-county metropolitan region is the main catchment area for trips to and from the Manhattan CBD. The Project would affect travel patterns within the Manhattan CBD and in other parts of the region. Travel patterns change more intensely when approaching and within the Manhattan CBD. To assess beneficial and adverse effects of the Project, the EA uses a combination of the regional 28-county study area and several local study areas. The local study areas change according to the issue being explored for effects. For example, the local study area used to assess the visual effects associated with installation of tolling infrastructure and tolling system equipment is much smaller than the local study area to assess air quality changes. Additional discussion of these study areas is provided in **Chapter 3**, "Environmental Analysis Framework," and in each chapter throughout the EA.

ES-2 August 2022

What is an Environmental Assessment (EA) and why is it needed for this Project?

Before a Federal agency makes a decision, the National Environmental Policy Act (NEPA) requires the Federal agency to understand and disclose the environmental effects of the action. An EA (40 CFR §1506.1(h)) is performed to ensure Federal agencies consider the environmental impacts of their actions in the decision-making process (40 CFR §1500.1(a)). For a proposed action that is not likely to have significant effects, or when the significance of the effect is unknown (40 CFR §1501.5), the EA aids in determining the significance of the adverse effects. If the adverse effects are not significant or can be mitigated below significant levels, the Federal agency may issue a Finding of No Significant Impact (FONSI) (40 CFR §1501.6). If there are significant effects that cannot be mitigated, the Federal agency must develop an Environmental Impact Statement (EIS) leading to a Record of Decision (ROD).

The Value Pricing Pilot Program (VPPP) and National Environmental Policy Act (NEPA)

Established by the U.S. Congress as the Congestion Pricing Pilot Program in 1991, and renamed in 1998, the VPPP aims to demonstrate whether and to what extent congestion pricing strategies can reduce congestion, while also exploring the effects of these strategies on "driver behavior, traffic volumes, transit ridership, air quality and availability of funds for transportation programs."

Enacted in 1970, NEPA requires that Federal agencies assess the environmental effects of their proposed actions before making decisions. Providing approval to the Project under the VPPP would be an action by FHWA and is, therefore, subject to NEPA.

Sources:

FHWA. "Value Pricing Pilot Program."
https://ops.fhwa.dot.gov/congestionpricing/
value pricing/index.htm
United States Environmental Protection Agency. "What is
the National Environmental Policy Act."
https://www.epa.gov/nepa/what-national-environmentalpolicy-act

Some roadways within the Manhattan CBD are part of the National Highway System and some have been improved funding with from the Federal government. In order to toll these roadways, the Project Sponsors need approval from U.S. Department of Transportation's Federal Highway Administration (FHWA), in this case through their Value Pricing Program (VPPP). When FHWA reviews a project sponsor's application to the VPPP with the intention of taking an action, it must comply with NEPA.

FHWA, as the lead Federal agency for the NEPA process, determined that an EA is the appropriate class of action for this Project as the Project's goals result primarily in operational changes, with very little physical impacts on the existing environment. The approach to reducing congestion in the Manhattan CBD lends itself to beneficial effects on air quality and quality of life.

FHWA recognizes that the Project could have effects on environmental justice populations. As a result, FHWA requested that the NEPA process include enhanced public outreach and coordination with Federal and state resource agencies.

WHY IS THE CBD TOLLING PROGRAM BEING CONSIDERED?

Traffic congestion has been a problem in the Manhattan CBD for many years, ⁶ and has been one of New York City's most challenging policy problems for generations. As the regional population and commerce have grown, traffic has snarled with such regularity over the years that a new word was created to describe it: gridlock.⁷

NYCDOT, MTA, and other transportation agencies have implemented programs to reduce congestion, and improve transit, pedestrian, and bicycle accessibility in and to the Manhattan CBD. NYCDOT has repurposed curbside parking to establish bicycle lanes and increased pedestrian space with sidewalk and corner bump outs. It has also converted curbside lanes and general-purpose traffic lanes to dedicated bus lanes on certain Manhattan avenues and eastwest, crosstown streets.

Additionally, MTA and other transit agencies offer reduced transit fares for the elderly, disabled, and school-aged children, and in early 2022, MTA implemented fare capping as part of its new fare system rollout (OMNY), which allows free, unlimited rides to customers the rest of the week once they have spent \$33 (the same as taking 12 trips). Many employers participate in a Federal program that allows employees to use pre-tax dollars to pay for transit, and many companies have adopted flexible work schedules, including options to work remotely.

Figure ES-3. Most Congested Urban Areas (2021)

United States
1. New York, NY
2. Chicago, IL
3. Philadelphia, PA
4. Boston, MA
5. Miami, FL

Source: INRIX, 2021

Despite these traffic-reduction initiatives, and despite the existence of the country's most extensive and robust public transit network, traffic congestion persists. In 2020 and 2021, New York City's traffic congestion ranked worst among the cities in the United States (**Figure ES-3**).8

State and City of New York officials and stakeholder and advocacy groups have conducted multiple studies over the past 45 years to determine the most effective way to address congestion in the Manhattan CBD. These studies overwhelmingly pointed to congestion pricing, or introduction of tolls based on traffic levels, as the most effective tool. Chapter 2, "Project Alternatives," and Appendix 2A, "Project Alternatives: Previous Studies and Concepts Considered," provide more information about other alternatives and these earlier studies.

ES-4 August 2022

PROJECT PURPOSE, NEED, AND OBJECTIVES

The Project purpose is to reduce traffic congestion in the Manhattan CBD in a manner that will generate revenue for future transportation improvements, pursuant to acceptance into FHWA's VPPP.

Why do we need to reduce traffic congestion?

Low travel speeds and unreliable travel times to, from, and within the Manhattan CBD increase commute and travel times for vehicles using the roadways, erode worker productivity, reduce bus and paratransit service quality, raise the cost of



deliveries and the overall cost of doing business, and delay emergency vehicles. Thus, there is a need to reduce vehicle congestion in the Manhattan CBD to improve the reliability and efficiency of the transportation system.

Why do we need money for transit investment?

"The only way to end traffic jams in Manhattan and the approaches to it is by making public transportation better."

Regional Plan Association, Regional Plan News, No. 82, February 1966

Transit is critical to New York City's overall economy, and to the region's residents, workers, and visitors, and continued investment in transit is necessary to ensure ongoing mobility and accessibility.

In 2019, MTA subways served 1.7 billion passengers and MTA buses carried 677.6 million passengers, providing access to employment, healthcare, education and the full range of services and entertainment options available throughout New York City. The 10 busiest subway stations in the MTA system are in the Manhattan CBD, and two of the 10 busiest MTA bus routes are in or serve the Manhattan CBD.⁹ The Long Island Rail Road and Metro-North Railroad were the busiest commuter rail systems in the United States in 2019, and Penn Station New York and Grand Central Terminal, both within the Manhattan CBD, are the two busiest passenger rail stations in North America.¹⁰

Congestion by the Numbers

Cost of Congestion: 102 hours of lost time; nearly \$1,595 per year per driver in the New York City region.*

Travel Speeds: Decreased 22% in the Manhattan CBD, from 9.1 miles per hour (mph) to 7.1 mph between 2010 and 2019.**

FHV Registrations: Tripled in New York City, from fewer than 40,000 to more than 120,000 between 2010 and 2019. Due to the effects of the COVID-19 pandemic and the city's continued cap on FHV registrations, the number of FHVs making trips fell to 70,000 by April 2022.†

Local Bus Speeds: Declined 28% in the Manhattan CBD since 2010. The average speed of Select Bus Service (New York City Transit's bus rapid transit service) routes in Manhattan are 19% slower than Select Bus Service routes in other boroughs.^{††}

Sources:

- INRIX 2021 Global Traffic Scorecard. https://inrix.com/scorecardcity/?city=New%20York%20City%20NY &index=5)
- " NYCDOT. August 2019. New York City Mobility Report. https://www1.nyc.gov/html/dot/downloads/pdf/mobility-report-print-2019.pdf.
- New York City Taxi and Limousine Commission and NYCDOT. June 2019. Improving Efficiency and Managing Growth in New York's For-Hire Vehicle Sector, NYC TLC FHV trip data.
- ^{††} NYCDOT. August 2019. New York City Mobility Report. https://www1.nyc.gov/html/dot/downloa_ds/pdf/mobility-report-print-2019.pdf; New York City Transit analysis.

MTA employs approximately 70,000 people, making it one of the largest individual employers in New York State (and larger than many small cities). Through its capital spending, MTA annually injects billions of dollars into the local economy, both through major infrastructure projects and

day-to-day operations and maintenance programs, indirectly supporting thousands of additional jobs far beyond its direct employment.¹¹

Beginning in 2017, MTA's operating agencies engaged in projects to address some root causes of declining service that had begun in 2010 and implemented improvements to commuter rail and subway infrastructure. As documented in MTA's 2020–2024 Capital Program, these projects resulted in substantial reductions in delay and improvements in on-time performance.¹²

Elements of MTA's commuter rail and subway system are more than 100 years old, and essential capital needs remain to ensure a state of good repair and to bring MTA's transit and rail assets into the 21st century. The 2020–2024 Capital Program is intended to "build on these achievements, ensuring that the improvements put in place will be sustainable for years to come." The program identifies \$52.0 billion of investments in the region's subways, buses, and commuter railroads. The following are key tenets of the 2020–2024 Capital Program.

- Investing to improve reliability
- Committing to environmental sustainability
- Building an accessible transit system for all New Yorkers
- Easing congestion and creating growth
- Improving safety and customer service through technology¹⁵

What are the Project objectives?

FHWA and the Project Sponsors have established the following objectives to further refine the Project purpose and address the needs described above.

- Reduce daily vehicle-miles traveled (VMT) within the Manhattan CBD by at least 5 percent
- Reduce the number of vehicles entering the Manhattan CBD daily by at least 10 percent
- Create a funding source for capital improvements and generate sufficient annual net revenues to fund \$15 billion for capital projects for the MTA Capital Program
- Establish a tolling program consistent with the purposes underlying the New York State legislation entitled the MTA Reform and Traffic Mobility Act¹⁶

ES-6 August 2022

WHAT ARE THE PROJECT ALTERNATIVES?

FHWA and the Project Sponsors screened a number of preliminary alternatives against the Project purpose, need, and three of the four objectives (**Table ES-1**). **Chapter 2, "Project Alternatives,"** provides this analysis in further detail. The CBD Tolling Alternative is the alternative that meets the purpose, need and three objectives of the Project. Thus, for the purposes of this EA, there are two alternatives:

- No Action Alternative, which would not implement a vehicular tolling program in the Manhattan CBD
- CBD Tolling Alternative (Action Alternative), which would implement a vehicular tolling program in the Manhattan CBD

Although the No Action Alternative does not meet the Project purpose and objectives, NEPA regulations require that it be evaluated and serve as the baseline condition against which the potential effects of the CBD Tolling Alternative are evaluated.

No Action Alternative

The No Action Alternative assumes the following existing policies and programs would continue and a number of planned initiatives would be implemented, including:

- A cap on the number of FHV licenses in New York City would remain.
- The two-way, protected bicycle lanes on the Brooklyn Bridge, implemented by NYCDOT in fall 2021, would remain.¹⁷
- NYCDOT would continue the current configuration of two lanes in each direction between Atlantic Avenue and the Brooklyn Bridge on the Brooklyn-Queens Expressway; it would initiate repairs to the bridges and structures between Atlantic Avenue and Sands Street.¹⁸
- NYCDOT would convert a traffic lane to a pedestrian walkway on the Ed Koch Queensboro Bridge lower level, and the existing shared-use path on the north side of the lower level would be used only for bicycles.
- TBTA and the Port Authority of New York and New Jersey (PANYNJ) would continue tolling at their bridges and tunnels, while the East River Bridges and Harlem River Bridges would remain untolled. **Chapter 1**, "Introduction," provides more information on current tolls.
- MTA would continue to implement transit and rail improvement projects in its 2020–2024
 Capital Program, based on the funding available. Appendix 4A.1, Table 4A.1-3, provides information on recent transit and rail improvement projects included in the EA analysis.
- NYCDOT and other New York City agencies would continue programs established in response to the COVID-19 pandemic, including the closure of certain sections of streets to vehicular traffic ("Open Streets") and the use of curbside parking lanes for outdoor dining ("Open Restaurants").
- NYCDOT would continue to develop bicycle and bus infrastructure including new bicycle and bus lanes. 19 Chapter 4E, "Transportation: Pedestrians and Bicycles," provides further information on recently implemented and planned bicycle improvements.

Table ES-1. Results of Preliminary Alternatives Screening¹

ALTERNATIVE	PURPOSE AND NEED: Reduce traffic congestion in the Manhattan CBD in a manner that will generate revenue for future transportation improvements	OBJECTIVE 1: Reduce daily vehicle- miles traveled (VMT) within the Manhattan CBD Criterion: Reduce by 5% (relative to No Action)	OBJECTIVE 2: Reduce the number of vehicles entering the Manhattan CBD daily Criterion: Reduce by 10% (relative to No Action)	OBJECTIVE 3: Create a funding source for capital improvements and generate sufficient annual net revenues to fund \$15 billion for capital projects for MTA's Capital Program
NA-1: No Action	Does not meet	Does not meet	Does not meet	Does not meet
NTP-1: Parking pricing strategies	Does not meet	Does not meet (see note 2)	Does not meet	Does not meet (see note 2)
T-1: Pricing on full roadways: Raise tolls or implement variable tolls on existing toll facilities	Does not meet	Does not meet (see note 3)	Does not meet (see note 3)	Does not meet
T-2: Pricing on full roadways: Toll East and Harlem River bridges	Does not meet (see note 4)	Meets	Meets	Does not meet (see note 4)
T-3: High-occupancy toll (HOT) lanes	Does not meet (see note 5)	Does not meet	Does not meet	Does not meet (see note 5)
T-4: Zone-based pricing: CBD Tolling Program	Meets	Meets	Meets	Meets
O-1: Parking pricing: Reduce government-issued parking permits	Does not meet	Meets	Meets	Does not meet
O-2: Provide additional taxi stands to reduce cruising	Does not meet	Does not meet (see note 6)	Does not meet	Does not meet
O-3: Create incentives for teleworking	Does not meet	Does not meet	Does not meet (see note 7)	Does not meet
O-4: Ration license plates	Does not meet	Meets	Meets	Does not meet
O-5: Mandatory carpooling	Does not meet	Meets	Meets	Does not meet
O-6: Truck time-of-day delivery restrictions	Does not meet	Does not meet (see note 8)	Does not meet (see note 8)	Does not meet

ES-8 August 2022

Notes for Table ES-1

- Screening was based on a variety of prior studies and documents, including the following: New York City Traffic Congestion Mitigation Commission, "Congestion Mitigation Strategies: Alternatives to the City's Plan" (December 10, 2007); and "Report to the Traffic Congestion Mitigation Commission & Recommended Implementation Plan" (January 31, 2008), and its appendices, including Cambridge Systematics, Inc., "Technical Memorandum: Telecommuting Incentives," prepared for New York City Economic Development Corporation and New York City Department of Transportation (December 10, 2007); Cambridge Systematics, Inc., "Technical Memorandum: Night Delivery Incentives," prepared for New York City Department of Transportation (December 10, 2007); Cambridge Systematics, Inc., "Technical Memorandum: Congestion Reduction Policies Involving Taxis," prepared for New York City Economic Development Corporation and New York City Department of Transportation (December 10, 2007); Cambridge Systematics, Inc., "Technical Memorandum: Increase Cost of Parking in the Manhattan Central Business District (CBD)," prepared for New York City Economic Development Corporation and New York City Department of Transportation (December 10, 2007).
- For NTP-1: VMT reduction was estimated at substantially less than 1 percent. Further, there is no law or agreement in place between the City of New York and MTA that would direct the revenue generated from this alternative to MTA to support the Capital Program.
- For T-1: This alternative would generate revenue, but the annual net revenues would not be sufficient to fund \$15 billion for capital projects for MTA's Capital Program. The revenue as well as reduction in VMT and number of vehicles with this alternative depends on how high the toll is raised and whether tolls are increased only on Triborough Bridge and Tunnel Authority (TBTA) facilities or both TBTA and Port Authority of New York and New Jersey facilities. However, with some crossings remaining untolled, traffic would divert to untolled facilities, thereby reducing the revenue and not reducing traffic. Further, this alternative would not target congestion in the Manhattan CBD, given that a number of free entry points to the Manhattan CBD would remain available.
- For T-2: Earlier studies showed this alternative would reduce congestion and could raise toll revenues equivalent to project objectives. However, there is no law or agreement in place between the City of New York and MTA that would direct the revenue to MTA to support the Capital Program.
- ⁵ For T-3: HOT Lanes can be effective revenue generators, but their ability to reduce congestion and raise enough revenue to meet the target is limited due to the availability of free lanes on the same highway.
- For O-2: Provision of additional taxi stands would have no effect on the number of taxis entering the Manhattan CBD and would not necessarily reduce VMT since taxis would need to travel back to a taxi stand after discharging customers. Further, this alternative would not broadly address VMT for all vehicles, nor would it reduce the number of vehicles entering the Manhattan CBD.
- For O-3: Earlier studies concluded that this alternative would reduce New York City commute trips by less than two percent. Recent experience with the COVID-19 pandemic has supported that conclusion. As the region returns to normal business activities, following large-scale, full-time teleworking, many office workers are continuing to telework, but traffic levels are returning to close to pre-COVID-19 pandemic levels (for more information, see **Chapter 1**, "**Introduction,**" **Section 1.4.1**). With such minimal impact, even combining this alternative with others like NTP-1 or O-2 would not yield congestion reductions and new revenue to meet the project's purpose, need and objectives.
- For O-6: To be successful, truck time-of-day restrictions would require receivers to be open and willing to receive the vehicles in overnight hours. Further, depending upon how the restrictions are implemented, some large trucks might instead send multiple small trucks, thereby increasing vehicle numbers and VMT.

CBD Tolling Alternative (Action Alternative)

The CBD Tolling Alternative would toll vehicles entering or remaining in the Manhattan CBD. Noncommercial passenger vehicles entering the CBD would be tolled once per day. Vehicles that remain in the Manhattan CBD are vehicles that are detected leaving, but not detected entering the same day. Given that they were detected leaving, they must have driven through the Manhattan CBD and, therefore, remained some portion of the day. Noncommercial passenger vehicles would be tolled no more than once a day. There would be exemptions for qualifying vehicles transporting a person with disabilities and qualifying authorized emergency vehicles.

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

The toll amount would be variable, with higher tolls charged during peak periods when congestion is greater. Because the effects are closely related to the toll structure, the CBD Tolling Alternative evaluated a range of toll structures in defined tolling scenarios. In most of these tolling scenarios, the toll rates for different types of vehicles, like delivery trucks, are different than the toll rates for noncommercial passenger vehicles.

Beneficial and Adverse Effects: What is important to know about the tolling scenarios in the CBD Tolling Alternative?

A decision on the actual toll structure will occur after the EA is completed. A Traffic Mobility Review Board (TMRB) will be established to recommendations develop on toll rates. exemptions, crossing credits applied against the CBD toll for tolls paid on other toll tunnels or bridges, and/or discounts. For the EA, to explore the range of effects that could occur with the CBD Tolling Alternative, the Project Sponsors initially developed six tolling scenarios (A-F). Each scenario includes different combinations of crossing credits, potential discounts (in the form of caps), and exemptions (Table ES-2). After the early public outreach, and given concerns expressed regarding diversions of truck traffic, a

How and When Would I be Tolled?

Below are some examples of when and how the toll would be applied.

- A car drives into the Manhattan CBD on Monday morning and leaves Monday evening before midnight. It would be detected when it enters and when it leaves the Manhattan CBD. Because passenger vehicles would be charged only once daily, a single toll would be charged.
- A car drives into the Manhattan CBD on Monday, and parks until it leaves on Wednesday. It would be charged entering on Monday and for remaining when it drove through the Manhattan CBD on Wednesday to leave. It would not be charged when it was parked the full 24-hours on Tuesday.
- A car makes two round trips into the Manhattan CBD on the same day. It would be charged a single toll, because passenger vehicles would be charged only once daily.
- A car is parked all week within the Manhattan CBD and then leaves the Manhattan CBD for a day trip on Saturday, returning before midnight. The car would be detected leaving (remaining) and entering the Manhattan CBD on the same day. Because passenger vehicles would be charged only once daily, a single toll would be charged on Saturday.
- A car is parked all week within the Manhattan CBD and then leaves the Manhattan CBD on Friday and returns on Monday. The car would be detected leaving (remaining) on Friday and entering when it returns on Monday. It would receive a charge on Friday for remaining and on Monday for entering. It would not be charged any other days when it was parked the entire day in the Manhattan CBD, nor the days when it was away.

seventh scenario (G) was added to avoid some of these traffic effects. Chapter 2, "Project Alternatives," provides more detail on each scenario while Subchapter 4A, "Transportation: Regional Transportation Effects and Modeling" and Subchapter 4B, "Transportation: Highways and Local Intersections," provides more information on traffic effects.

ES-10 August 2022

Table ES-2. Tolling Scenarios Evaluated for the CBD Tolling Alternative

	SCENARIO A	SCENARIO B	SCENARIO C	SCENARIO D	SCENARIO E	SCENARIO F	SCENARIO G
PARAMETER ¹	Base Plan	Base Plan with Caps and Exemptions	Low Crossing Credits for Vehicles Using Tunnels to Access the CBD, with Some Caps and Exemptions	High Crossing Credits for Vehicles Using Tunnels to Access the CBD	High Crossing Credits for Vehicles Using Tunnels to Access the CBD, with Some Caps and Exemptions	High Crossing Credits for Vehicles Using Manhattan Bridges and Tunnels to Access the CBD, with Some Caps and Exemptions	Base Plan with Same Tolls for All Vehicle Classes
Time Periods ²							
Peak: Weekdays	6 a.m. to 8 p.m.	6 a.m. to 8 p.m.	6 a.m. to 8 p.m.	6 a.m. to 8 p.m.	6 a.m. to 8 p.m.	6 a.m. to 10 a.m.; 4 p.m. to 8 p.m.	6 a.m. to 8 p.m.
Peak: Weekends	10 a.m. to 10 p.m.	10 a.m. to 10 p.m.	10 a.m. to 10 p.m.	10 a.m. to 10 p.m.	10 a.m. to 10 p.m.	10 a.m. to 10 p.m.	10 a.m. to 10 p.m.
Off Peak: Weekdays	8 p.m. to 10 p.m.	8 p.m. to 10 p.m.	8 p.m. to 10 p.m.	8 p.m. to 10 p.m.	8 p.m. to 10 p.m.	10 a.m. to 4 p.m.	8 p.m. to 10 p.m.
Overnight: Weekdays	10 p.m. to 6 a.m.	10 p.m. to 6 a.m.	10 p.m. to 6 a.m.	10 p.m. to 6 a.m.	10 p.m. to 6 a.m.	8 p.m. to 6 a.m.	10 p.m. to 6 a.m.
Overnight Weekends	10 p.m. to 10 a.m.	10 p.m. to 10 a.m.	10 p.m. to 10 a.m.	10 p.m. to 10 a.m.	10 p.m. to 10 a.m.	10 p.m. to 10 a.m.	10 p.m. to 10 a.m.
Potential Crossing Credits						•	
Credit Toward the CBD Toll for Tolls Paid at the Queens- Midtown, Hugh L. Carey, Lincoln, Holland Tunnels	No	No	Yes	Yes	Yes	Yes	No
Credit Toward the CBD Toll for Tolls Paid at the Robert F. Kennedy, Henry Hudson, George Washington Bridges	No	No	No	No	No	Yes	No
Potential Exemptions and Limit	ts (Caps) on Number	of Tolls per Day					
Cars, motorcycles, commercial vans	Once per day	Once per day	Once per day	Once per day	Once per day	Once per day	Once per day
Taxis	No cap	Once per day	Exempt	No cap	Exempt	Once per day	No cap
FHVs	No cap	Once per day	Three times per day	No cap	Three times per day	Once per day	No cap
Small and large trucks	No cap	Twice per day	No cap	No cap	No cap	Once per day	No cap
Buses	No cap	Exempt	No cap	No cap	Transit buses–Exempt No cap on others	Exempt	No cap
Approximate Toll Rate Assume	d ³						
Peak	\$9	\$10	\$14	\$19	\$23	\$23	\$12
Off Peak	\$7	\$8	\$11	\$14	\$17	\$17	\$9
Overnight	\$5	\$5	\$7	\$10	\$12	\$12	\$7

The parameters in this table were assumed for modeling purposes to evaluate the range of potential effects that would result from implementation of the CBD Tolling Alternative. Actual toll rates, potential credits, exemptions and/or discounts, and the time of day when toll rates would apply would be determined by the TBTA Board after recommendations are made by the Traffic Mobility Review Board. **Appendix 2E**, "**Project Alternatives: Definition of Tolling Scenarios**," provides more detailed information on the rates, potential crossing credits, exemptions, and/or discounts assumed for each tolling scenario

² Tolls would be higher during peak periods when traffic is greatest. These would be set forth by TBTA in the final toll schedule. All tolling scenarios include a higher toll on designated "Gridlock Alert" days, although the modeling conducted for the Project did not reflect this higher toll since it considers typical days rather than days with unusually high traffic levels.

Toll rates are for autos, commercial vans, and motorcycles using E-ZPass and are rounded. For all tolling scenarios, different rates would apply for vehicles not using E-ZPass; for Tolling Scenarios A through F, different vehicle classes would pay different tolls (see **Appendix 2E, "Definition of Tolling Scenarios"**). The peak E-ZPass rate (rounded) range across tolling scenarios for small trucks would be \$12-\$65; for large trucks, the range would be \$12-\$82.

There are several components to the toll structure, but the most important factor in the magnitude and distribution of effects from the Project is the toll rate. Overall, the Project would result in a congestion benefit both regionally and within the Manhattan CBD. On a local level, depending on the toll structure, near and adjacent to the Manhattan CBD there would be increases or decreases in traffic volumes as vehicles divert to other routes to avoid the toll. **Table ES-4** provides additional information regarding these effects and proposed mitigations. The following trends are important to understand:

- All the tolling scenarios would reduce traffic entering the Manhattan CBD.
- All the tolling scenarios would have an overall net benefit in congestion reduction for the region.
- Adding discounts, crossing credits, and exemptions would require that the overall toll rates increase, leading to more congestion reduction.
- Higher toll rates would reduce traffic, and increase transit ridership entering the Manhattan CBD.
- Higher toll rates would increase traffic diversions as drivers avoid the toll. This would lead
 to less traffic in the Manhattan CBD, and changes in traffic patterns outside of the CBD,
 with both increases and decreases of traffic in localized locations elsewhere.
- Crossing credits, which would credit some of the amount drivers pay for TBTA or PANYNJ
 tolls against the CBD toll, would bring the total costs of different routes into the CBD closer
 to parity and therefore change the degree to which, and balance of where, traffic
 reductions occur.
 - ❖ Tolling scenarios with crossing credits would have less effect on reducing traffic entering the Manhattan CBD from Queens, and much less effect on reducing traffic entering from New Jersey than tolling scenarios without crossing credits. Tolling scenarios with crossing credits would lead to greater decreases in traffic entering from north of 60th Street and Brooklyn.
 - Crossing credits would encourage some drivers to shift from the currently-free East River Bridges to TBTA's tolled tunnels. As a result, traffic would increase at the Queens-Midtown Tunnel and the Hugh L. Carey Tunnel, resulting in more traffic on the Long Island Expressway and a shift of traffic along the Gowanus Expressway from the BQE to the Hugh Carey Tunnel, as well as increases in traffic on the local streets in Manhattan that feed traffic to and from these tunnels.

In addition to the toll rate and crossing credits, several other factors play a role in generating beneficial and adverse effects.

Truck Toll Price. Unlike cars, trucks cannot shift to a different mode (e.g., transit). For trucks traveling through the CBD en route to their final destination, their only alternative to paying the toll is to not make the trip or divert around the Manhattan CBD. Similar to the general traffic, increased tolls decrease truck traffic entering the Manhattan CBD. Truck diversion increases with increases in the toll (similar to general traffic). In particular, trucks would divert to routes on highways in Staten Island and in the South Bronx.

Public Outreach Response

In response to concerns raised during the early Public Outreach related to increased truck traffic on the Cross Bronx Expressway and the fact that trucks do not have an alternate mode of travel to avoid the toll, Scenario G was added. This scenario charges the same toll rate for cars and trucks and significantly reduces truck diversions in the South Bronx and Staten Island. See Chapter 4A, "Regional Transportation Effects and Modeling."

Time of Day. Reducing the toll in the overnight period would reduce diversions to alternative routes, lessening effects outside the Manhattan CBD and encouraging delivery vehicles to shift to the less-congested overnight period. Though not as substantial with this lower overnight charge, traffic reductions would still occur.

ES-12 August 2022

HOW DOES THE ACTION ALTERNATIVE MEET THE PROJECT OBJECTIVES?

FHWA will consider the No Action and the CBD Tolling Alternative (Action Alternative) as a whole, while being mindful that the Action Alternative includes a range of potential tolling scenarios. **Table ES-3** summarizes how the No Action and the Action Alternative meet the Project purpose, needs, and objectives.

Table ES-3. Comparison of Evaluation Results for the No Action and CBD Tolling Alternatives

SCREENING CRITERION	NO ACTION ALTERNATIVE	CBD TOLLING (ACTION) ALTERNATIVE		
Purpose and Need: Reduce traffic congestion in the Manhattan CBD in a manner that will generate revenue for future transportation improvements	DOES NOT MEET	MEETS		
Objective 1: Reduce daily vehicle-miles traveled (VMT) within the Manhattan CBD Criterion: Reduce by 5% (relative to No Action)	DOES NOT MEET	MEETS		
Daily VMT reduction (2023)	0%	7.1% - 9.2%		
Objective 2: Reduce the number of vehicles entering the Manhattan CBD daily Criterion: Reduce by 10% (relative to No Action)	DOES NOT MEET	MEETS		
Daily vehicle reduction (2023)	0%	15.4% - 19.9%		
Objective 3: Create a funding source for capital improvements and generate sufficient annual net revenues to fund \$15 billion for capital projects for MTA's Capital Program	DOES NOT MEET	MEETS ¹		
Net revenue to support MTA's Capital Program ²	\$0	\$1.02 billion - \$1.48 billion		
Objective 4: Establish a tolling program consistent with the purposes underlying the New York State legislation entitled the "MTA Reform and Traffic Mobility Act"	DOES NOT MEET	MEETS		

Although Tolling Scenario B would not meet Objective 3 with the toll rates identified and assessed in this Environmental Assessment (EA), additional analysis was conducted to demonstrate that it would meet this objective with a higher toll rate; the resulting VMT reduction and revenue for that modified scenario would fall within the range of the other scenarios presented.

Chapter 16, "Summary of Effects," provides more information on the modified Tolling Scenario B.

As described in the EA, the TBTA Board would adopt a final toll structure, including toll rates and any crossing credits, discounts, and/or exemptions, informed by recommendations made by the Traffic Mobility Review Board and following a public hearing in accordance with the State Administrative Procedure Act.

What are the effects of the Project?

This EA analyzes 18 resource areas. **Figure ES-4** identifies those where there would be only beneficial or no adverse effects from the Project, and those areas that have identified potential adverse effects that will be mitigated. In the case of potential adverse effects, some of these adverse effects would only occur in certain tolling scenarios. **Table ES-4** provides more detail on which tolling scenarios would result in beneficial or adverse effects, and to what degree. Each respective chapter provides additional description and discussion.

The net revenue needed to fund \$15 billion depends on a number of economic factors, including but not limited to interest rates and term. For the purposes of this EA, the modeling assumes the Project should provide at least \$1 billion annually in total net revenue, which would be invested or bonded to generate sufficient funds. The net revenue values provided in this table are rounded and based on Project modeling.

Figure ES-4. Resource Areas and Effects Assessed in the EA

Areas with Only Beneficial or **Areas with Potential Adverse No Adverse Effects** Effects Transportation: Regional Transportation Transportation: Highways and Intersections Transportation: Parking Transportation: Transit Social Conditions: Population Transportation: Pedestrians and Bicycles Social Conditions: Neighborhood Character **Environmental Justice** Social Conditions: Public Policy **Economic Conditions** Energy Parks and Recreational Resources Historical and Cultural Resources Visual Resources Air Quality Energy Noise Natural Resources Hazardous Waste/Contaminated Materials Construction Effects

What are the effects of the Project on environmental justice populations?

Some of the Project effects occur in certain locations, so attention was given to whether these effects occurred broadly across the region or population, or whether they affect communities or populations of those who are low-income or historically underrepresented (environmental justice communities or populations). the following paragraphs provide additional explanation about related beneficial or adverse effects.

Reduced traffic would benefit all drivers traveling to and near the Manhattan CBD, including environmental justice populations, by improving travel times, reducing vehicle operating costs, and improving safety. The Project would also improve regional air quality, and most environmental justice populations who live in the Manhattan CBD would experience lower localized pollutant emissions due to reduced traffic. Additional benefits are described in **Chapter 17**, **"Environmental Justice."**

Low-Income Drivers. The cost of the new CBD toll would not be predominantly borne by low-income drivers. However, for low-income drivers who have no viable alternative to reach the Manhattan CBD other than private vehicle, the effect of that cost would be more burdensome because the cost of the toll would consume a larger percentage of their available income. Thus, the adverse effect on low-income drivers associated with the cost of the new toll would constitute a disproportionately high and adverse effect.

Taxis and FHVs. The New York City Taxi & Limousine Commission (TLC) requires that passengers reimburse the taxi driver for any toll costs during the trip; when no passengers are in the vehicle, drivers pay the toll today as part of the cost of doing business. TLC has also published rules that govern the high-volume class of FHVs (Uber and Lyft) and require that FHV services collect and remit to the TLC information on the itemized fare for the trips charged to the passengers, including the fare, toll, taxes and gratuities.

Any charge implemented by the CBD Tolling Program would likely follow the existing framework. Thus, when present, the customer would be responsible for paying the tolls and the final receipt would be itemized to show this. If no customer is present, the vehicle would be charged like a passenger vehicle, unless exempted or capped.

ES-14 August 2022

To address the high and disproportionate adverse effects on low-income drivers who feel they must still drive, the Project Sponsors will institute the following mitigations and enhancements.

MITIGATIONS

The Project will include a tax credit for CBD tolls paid by residents of the Manhattan CBD whose New York adjusted gross income for the taxable year is less than \$60,000. TBTA will coordinate with the New York State Department of Taxation and Finance (NYS DTF) to ensure availability of documentation needed for drivers eligible for the NYS tax credit.

TBTA will post information related to the tax credit on the project website, with a link to the appropriate location on the NYS DTF website to guide eligible drivers to information on claiming the credit.

TBTA will eliminate the \$10 E-ZPass tag deposit fee for customers without credit card backup.

TBTA will provide enhanced promotion of existing E-ZPass payment and plan options, including the ability for drivers to pay per trip (rather than a pre-load balance), refill their accounts with cash at participating retail locations, and discount plans already in place, about which they may not be aware.

TBTA will provide outreach and education on eligibility for existing discounted transit fare products and programs, including those for individuals 65 years of age and older, those with disabilities, and those with low incomes, about which many may not be aware.

The Project Sponsors commit to establishing an Environmental Justice Community Group that would meet on a bi-annual basis, with the first meeting six months after implementation, to share updated data and analysis and listen to potential concerns.

ENHANCEMENT

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

Several tolling scenarios include exemptions or discounts (in the form of caps) on the number of trips that can be charged for taxis and/or FHVs. Exemptions and caps decrease the toll burden on taxi/FHV drivers, while increasing the toll rate for other drivers to meet the Project's congestion and revenue objectives. If taxis and FHVs are charged for each trip, the demand for their service would decline, particularly in New York City, reducing trips and better meeting the Project objectives, but creating new direct costs and/or potential job insecurity. Because many New York City taxi and FHV drivers identify as part of an environmental justice population, this would result in disproportionately high and adverse effects. **Table ES-4** provides information on the magnitude of these effects.

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

MITIGATION

The Project Sponsors commit to working with the appropriate city and state agencies so that when passengers are present, they pay the toll, rather than the driver.

TBTA will work with NYCT to institute an Employment Resource Coordination Program to connect drivers experiencing job insecurity with a direct pathway to licensing, training and job placement with MTA or its affiliated vendors at no cost to the drivers (the \$60-\$70 fee for a bus operator's exam would be waived, and the \$10 fee for a commercial driver's license test would be reimbursed). This program will include resources and information on how to become a driver with MTA's paratransit carriers or a bus or train operator.

For those who may not want a commercial driver's license, TBTA will coordinate with MTA and NYCT to submit a request to the Federal Transit Administration (FTA) for a pilot program for consideration that will increase eligibility of taxi and FHV drivers to use their vehicles to provide paratransit trips. This will increase work opportunities for roughly 140,000 TLC-licensed drivers and improve service quality for the nearly 170,000 paratransit customers eligible for paratransit service. Drivers wishing to be part of Access-A-Ride's broker program would still need to meet broker driving training, including training to work with people with disabilities. The 6-month pilot program could begin ahead of implementation of the Project and would include data collection to measure progress and test the pilot program against a set of key performance indicators. MTA would produce a report to summarize the pilot program performance after six months for evaluation by MTA, FTA, and TLC. Should the pilot show progress towards success, MTA would propose that the pilot continue for a full year. If the pilot shows success after one year, the MTA, FTA, and TLC may discuss extending the pilot, making the program permanent, or discontinuing the pilot and return to existing policy.

How has the public been involved?

The Project Sponsors have implemented a robust public and agency outreach plan to solicit input from residents, businesses, Federal/regional/state/local agencies, across the 28-county study area. Information about the Project and the process was conveyed via the Project website, a Project Fact Sheet, social media, direct email, and multiple print media outlets. During the early Outreach period, 10 virtual public outreach and 9 environmental justice webinar sessions were held, for a total of 19 sessions. Real-time answers were provided to those who submitted written factual, technical and logistical questions related to the Project and process. The webinars, which remain available for viewing, were streamed live on YouTube, and recordings were subsequently posted on YouTube for on-demand viewing. As of February 2022, there were over 14,000 views of these recordings, combined. Meeting attendees were asked to fill out an optional survey; of the 309 responses received, roughly one-third identified themselves as minority. During the EA comment period, six virtual hearings will be held.

To encourage meaningful engagement with environmental justice populations, FHWA and the Project Sponsors also provided smaller meetings in the form of a technical advisory group and a stakeholder working group.

ES-16 August 2022

Environmental Justice Technical Advisory Group.

FHWA and the Project Sponsors invited community leaders and advocacy group representatives with knowledge of and experience with environmental justice populations to participate. Thirty-seven groups were invited, of which 16 groups accepted, and 14 groups have participated in one or more of the meetings to date. The Environmental Justice Technical Advisory Group met three times prior to the publication of this EA and will meet during the EA comment period.

Environmental Justice Stakeholder Working Group.

During the early outreach, individuals from populations throughout the study area were able to request participation or suggest others as participants in this group by using a form on the Project website or by contacting the Project Sponsors. All twenty-seven people who were nominated or expressed interested in participating were invited to join the Working Group, and 22 individuals attended one or both meetings. This group met twice prior to the publication of this EA and will meet again during the EA comment period.

In both groups, the agendas were largely driven by the participants while the Project Sponsors listened and provided answers to questions. The discussions during these sessions, along with the comments heard during the public outreach and environmental justice webinars, led the Project Sponsors to undertake additional analyses and develop additional mitigation measures.

Environmental Justice Outreach Response

As an independent action, MTA is currently transitioning its fleet to zeroemission buses. MTA is committed to prioritizing traditionally underserved communities and those impacted by poor air quality and climate change and has developed a new Environmental Justice Scoring framework to actively incorporate these priorities in the deployment phasing process of the transition.

Based on feedback received during the outreach conducted for the CBD Tolling Program and concerns raised by members of environmental justice communities, MTA is committed to prioritizing the Kingsbridge Depot and Gun Hill Depot, both located in and serving primarily environmental justice communities in Upper Manhattan and the Bronx, when electric buses are received in MTA's next major procurement of battery electric buses, which will begin later in 2022. This independent effort by MTA is anticipated to provide air quality benefits to the environmental justice communities in the Bronx.

Table ES-4. Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios

EA CHAPTER/ ENVIRONMENTAL	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	TOLLING SCENARIO								MITIGATION AND ENHANCEMENTS		
CATEGORY				IADLE	Α	В	С	D	Е	F	G	EFFECT			
	Vehicle Volumes		Crossing locations to Manhattan CBD	% Increase or decrease in daily vehicles entering the Manhattan CBD relative to No Action Alternative	-15%	-16%	-17%	-19%	-20%	-18%	-17%	No	No mitigation needed. Beneficial effects		
	Auto Journeys to		Manhattan CBD	% Increase or decrease in worker auto journeys to Manhattan CBD relative to No Action Alternative	-5%	-5%	-7%	-9%	-11%	-10%	-6%	No	No mitigation needed. Beneficial effects		
	CBD overall. Some diversions to different crossing	Some diversions to different crossings to Manhattan CBD or around the Manhattan CBD	Manhattan CBD	Absolute increase or decrease in daily worker auto trips to Manhattan CBD relative to No Action Alternative	-12,571	-12,883	-17,408	-24,017	-27,471	-24,433	-14,578	INU	No mingation needed. Deficition effects		
4A – Transportation: Regional Transportation Effects and	Truck Trips Through Manhattan CBD	altogether, depending on tolling scenario. As traffic, including truck trips, increase on some	traffic, including truck trips, increase on some circumferential highways, simultaneously there is a reduction in traffic on other highway segments to the CBD.	traffic, including truck trips, increase on some circumferential highways, simultaneously there is a reduction in traffic on other highway segments to the CBD.	Manhattan CBD	Increase or decrease in daily truck trips through Manhattan CBD (without origin or destination in the CBD) relative to No Action Alternative	-4,645 (-55%)	-5,695 (-59%)	-5,253 (-63%)	-5,687 (-68%)	-6,604 (-79%)	-6,784 (-81%)	-6,567 (-21%)		No mitigation needed. Beneficial effects
Modeling	Transit Journeys		Manhattan CBD	% Increase or decrease in daily Manhattan CBD-related transit journeys relative to No Action Alternative	+1 to +3%							No	No mitigation needed. No adverse effects		
		transit mode.	Manhattan CBD					-9% to -7%)						
			NYC (non-Manhattan CBD)	1				-1 to 0%				_	No mitigation needed. Beneficial effects		
			New York north of NYC	% Increase or decrease				-1% to 0%					in the Manhattan CBD, New York City (non-CBD), north of New York City, and		
	Traffic Results		Long Island	in daily VMT relative to No Action Alternative			Less th	nan (+) 0.2%	change			No	Connecticut; although there would be VMT increases in Long Island and New Jersey,		
			New Jersey	1			Less th	nan (+) 0.2%	change				the effects would not be adverse.		
			Connecticut				Less th	nan (+) 0.2%	change						

EA CHAPTER/ ENVIRONMENTAL	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN			TOI	LLING SCEN	IARIO			POTENTIAL ADVERSE	MITIGATION AND ENHANCEMENTS
CATEGORY				TABLE	Α	В	С	D	Е	F	G	EFFECT	
4B – Transportation: Highways and Local Intersections	Traffic–Highway Segments	The introduction of the CBD Tolling Program may produce increased congestion on highway segments approaching on circumferential roadways used to avoid Manhattan CBD tolls, resulting in increased delays and queues in midday and PM peak hours on certain segments	10 highway segments (AM)		0 out of 1) highway o	corridors in t	the analyzed		Mitigation needed. The Project Sponsors will implement a monitoring plan prior to implementation with post-implementation data collected approximately three months after the start of operations and including thresholds for effects; if the thresholds are			
		in some tolling scenarios: Westbound Long Island Expressway (I-495) near the Queens-Midtown Tunnel (midday) Approaches to westbound George Washington Bridge on I-95 (midday) Southbound and northbound FDR Drive	10 highway segments (midday)	Highway segments with increased delays and queues in peak hours that would result in adverse effects	2 out of 10	highway co		e analyzed to olling Scena	enario D), as	Yes	reached or crossed, the Project Sponsors will implement Transportation Demand Management (TDM) measures, such as ramp metering, motorist information, signage at all identified highway locations with adverse effects upon implementation of the Project.		
		between East 10th Street and Brooklyn Bridge (PM) Other locations will see an associated decrease in congestion particularly on routes approaching the Manhattan CBD.	10 highway segments (PM)		1 out of 10	highway co		e analyzed to olling Scena		Post-implementation, the Project Sponsors will monitor effects and, if needed, TBTA will modify the toll rates, crossing credits, exemptions, and/or discounts to reduce adverse effects.			
		Shifts in traffic patterns, with increases in traffic at	363 locations (All day)	Number of instances of intersections with an	9	10	24	50	48	50	10		
		some locations and decreases at other locations, would change conditions at some local	102 locations (AM)		2	2	3	3	3	3	2	_	Mitigation needed. The Project Sponsors will monitor those intersections where
	Intersections	intersections within and near the Manhattan CBD.	102 locations (midday) 102 locations (PM)	increase in volumes of 50 or more vehicles in the	1	2	4	16 10	16 9	17 9	0	-	adverse effects were identified and
		Of the 102 intersections analyzed, most intersections would see reductions in delay.	57 locations (overnight)	peak hours.	5	5	16	21	20	21	5	-	implement appropriate signal timing adjustments to mitigate the effect, per
		Potential adverse effects on four local intersections in Manhattan: Trinity Place and Edgar Street (midday); East 36th Street and Second Avenue (midday); East 37th Street and Third Avenue (midday); East 125th Street and Second Avenue (AM, PM)	4 locations	Locations with potential adverse effects that would be addressed with signal timing adjustments	0	0	0	4	4	4	0	Yes	NYCDOT's normal practice. Enhancement Refer to the overall enhancement on monitoring at the end of this table.
			New York City Transit		1.5% to 2.1%								
			PATH					0.8% to 2.0	%				
			Long Island Rail Road]				0.6% to 2.0	%			1	
		The Project would generate a dedicated revenue	Metro-North Railroad]				0.6% to 1.9	%			1	
		source for investment in the transit system.	NJ TRANSIT commuter rail					0.3% to 2.3	%			1	
4C -	Tanana't Construct	Transit ridership would increase by 1 to 2 percent systemwide for travel to and from the Manhattan	MTA/NYCT Buses	% Increase or decrease				1.3% to 1.6	%			, N. I.	No mitigation needed. No adverse
Transportation: Transit	Transit Systems	CBD, because some people would shift to transit	NJ TRANSIT Bus	in total daily transit ridership systemwide				0.5% to 1.1	%			No	effects
		rather than driving. Increases in transit ridership would not result in adverse effects on line-haul capacity on any transit routes.	Other buses (suburban and private operators)	' '				0.0% to 0.9	%				
	C	F	Ferries (Staten Island Ferry, NYC Ferry, NY Waterway, Seastreak)					2.5% to 3.5	%				
			Roosevelt Island Tram					1.7% to 4.1	%				

ES-20 August 2022

EA CHAPTER/ ENVIRONMENTAL	. TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE			TOL	LING SCEN	ARIO			POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
CATEGORY					Α	В	С	D	Е	F	G		
			Manhattan local buses		Increases of 0.5% to 1.2%								
			Bronx express buses		-1.6% to 2.2%								
	Bus System Effects		Queens local and express buses (via Ed Koch Queensboro Bridge)		2.0% to 2.8%								
		Decreases in traffic volumes within the Manhattan CBD and near the 60th Street boundary of the	Queens express buses (via Queens-Midtown Tunnel)	% Increase or decrease				-1.3% to 4.1	%				
		Manhattan CBD would reduce the roadway congestion that adversely affects bus operations,	Brooklyn local and express buses	at maximum passenger load point				1.3% to 2.6%	%			No	No mitigation needed. No adverse effects
		facilitating more reliable, faster bus trips.	Staten Island express	Ισαύ μοιτιί				3.7% to 4.5%	%				
			routes (via Brooklyn) Staten Island express	-				1.0% to 2.8%	%				
			routes (via NJ) NJ/West of Hudson buses		-1.4% to 1.4%								
4C – Transportation: Transit (Cont'd)			(via Holland Tunnel) NJ/West of Hudson buses	_									
			(via Lincoln Tunnel)					0.4% to 1.5%	%				
		Increased ridership would affect passenger flows with the potential for adverse effects at certain vertical circulation elements (i.e., stairs and escalators) in five transit stations: — Hoboken Terminal, Hoboken, NJ PATH station — Times Sq-42 St/42 St-Port Authority Bus Terminal subway station in the Manhattan CBD (N, Q, R, W, and S; Nos. 1, 2, 3, and 7; and A, C, E lines) — Flushing-Main St subway station, Queens (No. 7 line) — 14th Street-Union Square subway station in the Manhattan CBD (Nos. 4, 5, and 6; and L, N, Q, R, W lines) — Court Square subway station, Queens (No. 7 and E, G, M lines)	Hoboken Terminal–PATH station (NJ) Stair 01/02	Net passenger increases or at stair in the peak hour	45	72	122	164	240	205	139	Yes	Mitigation needed for Tolling Scenarios E and F. TBTA will coordinate with NJ TRANSIT and PANYNJ to monitor pedestrian volumes on Stair 01/02 one month prior to commencing tolling operations to establish a baseline, and two months after Project operations begin. If a comparison of Stair 01/02 passenger volumes before and after Project implementation shows an incremental change that is greater than or equal to 205, then TBTA will coordinate with NJ TRANSIT and PANYNJ to implement improved signage and wayfinding to divert some people from Stair 01/02, and supplemental personnel if needed.
			42 St-Times Square– subway station (Manhattan) Stair ML6/ML8 connecting mezzanine to uptown 1/2/3 lines subway platform	Relative increase or decrease in passenger volumes at station OVERALL as compared to Tolling Scenario E (not only at the affected stair or location) in the peak hour, peak period	63%	59%	68%	82%	100%	82%	56%	Yes	Mitigation needed. TBTA will coordinate with MTA NYCT to implement a monitoring plan for this location. The plan will identify a baseline, specific timing, and a threshold for additional action. If that threshold is reached, TBTA will coordinate with MTA NYCT to remove the center handrail and standardize the riser, so that the stair meets code without the hand rail. The threshold will be set to allow for sufficient time to implement the mitigation so that the adverse effect does not occur.

August 2022

EA CHAPTER/ ENVIRONMENTAL	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN			TOL	LING SCEN	IARIO			POTENTIAL ADVERSE	MITIGATION AND ENHANCEMENTS
CATEGORY				TABLE	Α	В	С	D	Е	F	G	EFFECT	
4C – Transportation: Transit (Cont'd)			Flushing-Main St subway station (Queens)–Escalator E456 connecting street to mezzanine level	Relative increase or decrease in passenger volumes at station OVERALL as compared to Tolling Scenario E (not only at the affected stair or location) in the peak hour, peak period	116%	91%	108%	116%	100%	133%	72%	Yes	Mitigation needed. TBTA will coordinate with MTA NYCT to implement a monitoring plan for this location. The plan will identify a baseline, specific timing, and a threshold for additional action. If that threshold is reached, MTA NYCT will increase the speed from 100 feet per minute (fpm) to 120 fpm.
	Transit Elements (Cont'd)	Increased ridership would affect passenger flows with the potential for adverse effects at certain vertical circulation elements (i.e., stairs and escalators) in five transit stations (cont'd)	Union Sq subway station (Manhattan)–Escalator E219 connecting the L subway line platform to the Nos. 4/5/6 line mezzanine	Relative increase or decrease in passenger volumes at station OVERALL as compared to Tolling Scenario E (not only at the affected stair or location) in the peak hour, peak period	63%	82%	87%	102%	100%	95%	61%	Yes	Mitigation needed. TBTA will coordinate with MTA NYCT to implement a monitoring plan for this location. The plan will identify a baseline, specific timing, and a threshold for additional action. If that threshold is reached, MTA NYCT will increase the escalator speed from 100 fpm to 120 fpm.
			Court Sq subway station (Queens)–Stair P2/P4 to Manhattan-bound No. 7 line	Relative increase or decrease in passenger volumes at station OVERALL as compared to Tolling Scenario E (not only at the affected stair or location) in the peak hour, peak period	98%	90%	102%	104%	100%	117%	97%	Yes	Mitigation needed. TBTA will coordinate with MTA NYCT to implement a monitoring plan for this location. The plan will identify a baseline, specific timing, and a threshold for additional action. If that threshold is reached, TBTA will coordinate with MTA NYCT to construct a new stair from the northern end of the No. 7 platform to the street. The threshold will be set to allow for sufficient time to implement the mitigation so that the adverse effect does not occur.
		All tolling scenarios would result in a reduction in parking demand within the Manhattan CBD of a	Manhattan CBD	Narrative	Re	eduction in p	arking dem	and due to r	eduction in a	uto trips to Cl	3D	No	No mitigation needed. Beneficial effects
4D – Transportation: Parking	Parking Conditions	similar magnitude to the reduction in auto trips into the Manhattan CBD. With a shift from driving to transit, there would be increased parking demand at subway and commuter rail stations and park-and-ride facilities outside the Manhattan CBD.	Transit facilities	Narrative	Reduction in parking demand due to reduction in auto trips to CBD Small changes in parking demand at transit facilities, corresponding to increased commuter rail and subway ridership					No	No mitigation needed. No adverse effects		
4E – Transportation: Pedestrians and Bicycles	Pedestrian Circulation	Increased pedestrian activity on sidewalks outside transit hubs because of increased transit use. At all but one location in the Manhattan CBD (Herald Square/Penn Station), the increase in transit riders would not generate enough new pedestrians to adversely affect pedestrian circulation in the station area. Outside the Manhattan CBD, transit usage at individual stations would not increase enough to adversely affect pedestrian conditions on nearby sidewalks, crosswalks, or corners.	Herald Square/Penn Station NY	Sidewalks, corners, and crosswalks with pedestrian volumes above threshold in AM / PM peak periods	Adverse effects on pedestrian circulation at one sidewalk segment and two crosswalks							Yes	Mitigation needed. The Project Sponsors will implement a monitoring plan at this location. The plan will include a baseline, specific timing, and a threshold for additional action. If that threshold is reached, the Project Sponsors will increase pedestrian space on sidewalks and crosswalks via physical widening and/or removing or relocating obstructions.

ES-22 August 2022

EA CHAPTER/ ENVIRONMENTAL	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	TOLLING SCENARIO POTENTIAL ADVERSE MITIGATION AND ENHANCEMENTS
CATEGORY					A B C D E F G EFFECT
	Bicycles	Small increases in bicycle trips near transit hubs	Manhattan CBD	Narrative	Small increases in bicycle trips near transit hubs with highest increases in pedestrian trip share No mitigation needed. No adverse effects
4E – Transportation:		and as a travel mode	Outside Manhattan CBD	Narrative	Some shifts from automobile to bicycles No mitigation needed. No adverse effects
Pedestrians and Bicycles (Cont'd) Safety		No adverse effects	Overall	Narrative	No substantial increases in pedestrian volumes or increased safety concerns, including at existing identified high-crash locations. Overall, fewer vehicular trips entering and exiting the Manhattan CBD, the CBD Tolling Alternative could result in reduced traffic volumes at these locations. This would help to reduce vehicle-vehicle and vehicle-pedestrian conflicts, leading to an overall benefit to safety. No mitigation needed. No adverse effects
	Benefits	Benefits in and near the Manhattan CBD	28-county study area	Narrative	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 mitigation needed. Beneficial effects
	Community Cohesion	Changes to travel patterns, including increased use of transit, resulting from new toll	28-county study area	Narrative	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 mitigation needed. No adverse effects (see "Environmental Justice" below for mitigation related to increased costs for low-income drivers).
5A – Social Conditions: Population	Indirect Displacement	No notable changes in socioeconomic conditions or cost of living so as to induce potential involuntary displacement of residents	Manhattan CBD	Narrative	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 (see "Economic Conditions" below).
	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	Manhattan CBD	Narrative	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.

August 2022

EA CHAPTER/ ENVIRONMENTAL	_ TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE			TOL	LING SCEN	ARIO			POTENTIAL ADVERSE	MITIGATION AND ENHANCEMENTS
CATEGORY				IADLE	Α	В	С	D	E	F	G	EFFECT	
		cial Benefits to vulnerable social groups from new funding for MTA Capital Program			persons with creating a fu capital progr Elderly indivi service with	n disabilities unding sour rams and by iduals would the CBD To	transit-dependence for the Moreover reducing conditions to be the conditions of the conditions are the condi	nerable social endent popula TA 2020–202 engestion in the the travel-tin ive, as bus pa subway and,	ations, and 24 Capital F ne Manhatta ne and relial assengers to	non-driver p Program (and n CBD). Dility improve and to be old	opulations by d subsequent subsequent sequents to bus er than riders	y t	
	Effects on Vulnerable Social Groups		28-county study area	Narrative				it from travel-					No mitigation needed . No adverse effects
5A – Social Conditions: Population (Cont'd)	·				subways and MTA's parate transport pa who drive the enhancement	d buses, an transit servi ratransit use o the Man nts propose	d elderly indi ce, including ers. Elderly p hattan CBD d for low-ind	ualifying disal viduals with a great taxis and Foeople with drawould be a come and disannattan CB	a qualifying of HVs operatisabilities are entitled to to abled popu	disability car ing on behand low-incom he same malations, in go	n also receive alf of MTA to ne individuals nitigation and	e o s d	
	Access to Employment	Increased cost for small number of people who drive to work	28-county study area	Narrative	offsetting in would do so reduced cor travel to em	crease in tra based on t ngestion in t ployment w the wide ra	ansit ridershi he need or c he Manhatta ithin the Man nge of transi	odes to and w p. Those who convenience c in CBD. Negli hattan CBD a t options avai	would drive of driving and gible effect and reverse	e despite the d would bene (less than 0. -commuting	CBD toll efit from the 1%) on from the	No	No mitigation needed. No adverse effects
				Narrative				local streets acter of the M			the defining	No No	No mitigation needed. No adverse effects
5B – Social Condit Character	tions: Neighborhood	No notable change in neighborhood character	Area near 60th Street Manhattan CBD boundary	Narrative	just north of disinvestme	Changes in parking demand near the 60th Street CBD boundary (including increase just north of 60th Street and decreases just to the south) would not create a climate disinvestment that could lead to adverse effects on neighborhood character nor alt the defining elements of the neighborhood character of this area.						f No	No mitigation needed. No adverse effects
5C – Social Condit	tions: Public Policy	No effect	28-county study area	Narrative				rith regional t dy area and tl			l other public	No No	No mitigation needed . No adverse effects
	Benefits	Regional economic benefits	28-county study area	Narrative	time reliabil	ity improver ovements a	nents, which	on relief in ter would increavehicle opera	ase producti	vity and utili	ty, as well as	S No	No mitigation needed. Beneficial effects
6 – Economic	Economic Effects of Toll Costs	Cost of new toll for workers and businesses in the CBD that rely on vehicles	Manhattan CBD	Narrative	CBD. Given share, the to not adverse	the high le all would affely ally affect open	vel of transit ect only a sm erations of b	industry or oc access in the nall percentag usinesses in xi/FHV indust	e CBD and lile of the ove the Manhatt	nigh percent rall workford	age of transi e. This would	t d No	No mitigation needed. No adverse effects
Conditions	Price of Goods	Cost of new toll would not result in changes in the cost of most consumer goods	Manhattan CBD	Narrative	increase as passed alor per toll cha including sr would mini (constructio	sociated wing to receive arge (since mall busines mize the control materials	ith the new ing business trucks mak sses and mic cost to any	ange in cost toll in the CF es would be e multiple d cro-businesse individual b, beverages) ket.	BD Tolling Additional distributed a seliveries) es es, receivinquisiness. Se	Alternative that the several specially for smaller decome comme	nat would be ral customers businesses liveries. This odity sectors	No No	No mitigation needed . No adverse effects

ES-24 August 2022

EA CHAPTER/ ENVIRONMENTAL	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN			TOL	LING SCEN	ARIO			POTENTIAL ADVERSE	MITIGATION AND ENHANCEMENTS
CATEGORY				TABLE	Α	В	С	D	Е	F	G	EFFECT	
6 – Economic Conditions	Taxi and FHV	Depending on the tolling scenario, the toll could reduce taxi and FHV revenues due to a reduction in taxi/FHV VMT with passengers within the CBD. While this could adversely affect individual drivers (see "Environmental Justice" below), the industry would remain viable overall.	28-county study area	Net change in daily taxi/FHV VMT regionwide	-126,993 (-2.9%)	-14,028 (-0.3%)	-73,413 (-1.7%)	-217,477 (-5.0%)	-116,065 (-2.7%)	-4,888 (-1.0%)	-137,815 (-3.2%)	No	No mitigation needed. No adverse effects (see "Environmental Justice" below
	Industry		20-county study area	Net change in daily taxi/FHV VMT in the CBD	-21,498 (-6.6%)	+15,020 (+4.6%)	-11,371 (-3.5%)	-54,476 (-16.8%)	-25,621 (-7.9%)	+4,962 (+1.5%)	-27,757 (-8.6%)	NO	for mitigation related to effects on taxi and FHV drivers).
(Cont'd)	Local Economic Effects	Changes in parking demand near the 60th Street CBD boundary	Area near 60th Street Manhattan CBD boundary	Narrative	Changes in increases ju the viability on the create a character.	st north of 6 of one or mo	60th Street a	and decreas facilities in th		No mitigation needed. No adverse effects			
7 – Parks and Recreational Resources		New tolling infrastructure, tolling system equipment, and signage in the southern portion of Central Park	Manhattan CBD	Narrative	The Project would replace four existing streetlight poles at three detection locations in Central Park near 59th Street and on two adjacent sidewalks outside the park's wall. These poles would be in the same locations as existing poles and would not reduce the amount of park space or affect the features and activities of the park. The Project would also place tolling infrastructure beneath the structure of the High Line, outside the park area atop the High Line structure. FHWA through the public involvement process is soliciting public input related to the Project's effects on these parks (see Chapter 19 ; "Section 4(f) Evaluation").						park's wall. of reduce the Project would side the park of process is	No	No mitigation needed. Refer to Chapter 7, "Parks and Recreational Resources," for a listing of measures to avoid adverse effects to parks.
8 – Historic and Cul	Itural Resources	New tolling infrastructure and tolling system equipment on or near historic properties	45 historic properties within the Project's Area of Potential Effects (APE)	Narrative	Preservation	n Act, FHWA	has determ	ined that the	Project woul	06 of the Nati d have No Ac ce has concu	lverse Effect		No mitigation needed. Refer to Chapter 8, "Historic and Cultural Resources," for a listing of measures to avoid adverse effects to historic properties.
9 – Visual Resources		Changes in visual environment resulting from new tolling infrastructure and tolling system equipment	Area of visual effect	Narrative	similar structure array of toll images of lice	tures alread ing system cense plates	ly in use thr equipment to be colle	oughout Ne would use cted without	w York City. infrared illum any need for	tlight poles, s Cameras inc ination at ni visible light. effect on visu	cluded in the ght to allow The Project	No	No mitigation needed. No adverse effects

August 2022

EA CHAPTER/ ENVIRONMENTAL	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN			TOL	LING SCEN	IARIO			POTENTIAL ADVERSE	MITIGATION AND ENHANCEMENTS
CATEGORY		30		TABLE	Α	В	С	D	E	F	G	EFFECT	
				Increase or decrease in Annual Average Daily Trips (AADT)	3,901	3,996	2,056	1,766	3,757	2,188	3,255		No mitigation needed. No adverse effects Enhancements 1. Refer to the overall enhancement on
					509	704	170	510	378	536	50	No	monitoring at the end of this table. 2. NYCDOT will coordinate to expand the existing network of sensors to monitor priority locations, and supplement a
				Potential adverse air quality effects from truck diversions	No	No	No	No	No	No	No		smaller number of real-time PM _{2.5} monitors to provide insight into time-of-day patterns to determine whether the changes in air pollution can be attributed to changes in traffic occurring after implementation of the Project. The Project Sponsors will monitor
		Increases or decreases in emissions related to truck traffic diversions	I-95, Bergen County, NJ	Increase or decrease in AADT	9,843	11,459	7,980	5,003	7,078	5,842	12,506		air quality prior to implementation (setting a baseline), and two years following implementation. Following the initial two-year post-implementation analysis period, the Project Sponsors will assess the magnitude and variability of changes in air
10 – Air Quality				Increase or decrease in daily number of trucks	801	955	729	631	696	637	-236	No	quality to determine whether more monitoring is necessary. 3. MTA is currently transitioning its fleet to zero-emission buses, which will reduce air pollutants and improve air quality near bus
				Potential adverse air quality effects from truck diversions	No	No	No	No	No	No	No		depots and along bus routes. MTA is committed to prioritizing traditionally underserved communities and those impacted by poor air quality and climate change and has developed an approach that actively incorporates these priorities in the deployment phasing process of the transition. Based on feedback received during the outreach conducted for the Project and concerns raised by members of environmental justice communities, TBTA coordinated with MTA NYCT, which
			RFK Bridge, NY	Increase or decrease in AADT	18,742	19,440	19,860	19,932	20,465	20,391	21,006		
				Increase or decrease in daily number of trucks	2,257	2,423	2,820	3,479	4,116	3,045	432	No	is committed to prioritizing the Kingsbridge Depot and Gun Hill Depot, both located in and serving primarily environmental justice communities in Upper Manhattan and the Bronx, when electric buses are received in
				Potential adverse air quality effects from truck diversions	No	No	No	No	No	No	No		MTA's next major procurement of battery electric buses, which will begin later in 2022. This independent effort by MTA NYCT is anticipated to provide air quality benefits to the environmental justice communities in the Bronx.

ES-26 August 2022

EA CHAPTER/ ENVIRONMENTAL	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE		TOLLING SCENARIO				POTENTIAL ADVERSE					
CATEGORY	CATEGORY				A	В	С	D		E	F	G	EFFECT		
11 – Energy		Reductions in regional energy consumption	28-county study area	Narrative		Reductions	in regional	VMT wou	ıld reduce	energy o	consumpt	on	No	No mitigation needed. Beneficial effects	
12 – Noise			Bridge and tunnel crossings	Narrative		um noise lev dtown Tunne						adjacent to the	No	No mitigation needed. No adverse effects	
		Imperceptible increases or decreases in noise levels resulting from changes in traffic volumes	Local streets	Narrative	Tolling Sce Tolling Sce noise level not be per	Tolling Scenario C was used to assess noise level changes in Downtown Brooklyn Tolling Scenario D was used at all other locations assessed. The maximum predicted noise level increases (2.5 dB(A)), which were at Trinity Place and Edgar Street, would not be perceptible. There was no predicted increase in noise levels in the Downtown Brooklyn locations.								Enhancement Refer to the overall enhancement on monitoring at the end of this table.	
13 – Natural Resources	3	Construction activities to install tolling infrastructure near natural resources	Sites of tolling infrastructure and tolling system equipment locations	Narrative	and ecolog		es will be	managed	through			on stormwater nitments. The		Refer to Chapter 13, "Natural Resources," for a listing of construction commitments to avoid, minimize, or mitigate potential negative effects.	
14 – Hazardous Waste		Potential for disturbance of existing contaminated or hazardous materials during construction	Sites of tolling infrastructure and tolling system equipment locations	Narrative	disturbance containing	of existing	roadway int ead-based	rastructur paint, or	re and util r other h	lities that azardous	could con	removal, or tain asbestos- ces. Potentia	. No	Refer to Chapter 14, "Asbestos-Containing Materials, Lead-Based Paint, Hazardous Wastes, and Contaminated Materials," for a listing of construction commitments to avoid, minimize, or mitigate potential negative effects.	
15 – Construction Effec	cts	Potential disruption related to construction for installation of tolling infrastructure	Sites of tolling infrastructure and tolling system equipment locations	Narrative	activities, v	ith a duratio	n of less tha	an one ye	ar overall	, and app	roximatel	m construction y two weeks a commitments.	. No	Refer to Chapter 15, "Construction Effects," for a listing of construction commitments to avoid, minimize, or mitigate potential negative effects.	

August 2022

EA CHAPTER/ ENVIRONMENTAL	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE						TOLLING SCENARIO			MITIGATION AND ENHANCEMENTS
17 – Environmental Justice	Potential disproportionately high and adverse effects on low- income drivers	The increased cost to drivers with the new CBD toll would disproportionately affect low-income drivers to the Manhattan CBD who do not have an alternative transportation mode for reaching the Manhattan CBD.	28-county study area	Narrative	The increase income drive					roportionately	affect low-	Yes	Mitigation needed. The Project will include a tax credit for CBD tolls paid by residents of the Manhattan CBD whose New York adjusted gross income for the taxable year is less than \$60,000. TBTA will coordinate with the New York State Department of Taxation and Finance (NYS DTF) to ensure availability of documentation needed for drivers eligible for the NYS tax credit. TBTA will post information related to the tax credit on the Project website, with a link to the appropriate location on the NYS DTF website to guide eligible drivers to information on claiming the credit. TBTA will eliminate the \$10 refundable deposit currently required for E-ZPass customers who do not have a credit card linked to their account, and which is sometimes a barrier to access. TBTA will provide enhanced promotion of existing E-ZPass payment and plan options, including the ability for drivers to pay per trip (rather than a pre-load balance), refill their accounts with cash at participating retail locations, and discount plans already in place, about which they may not be aware. TBTA will coordinate with MTA to provide outreach and education on eligibility for existing discounted transit fare products and programs, including those for individuals 65 years of age and older, those with disabilities, and those with low incomes, about which many may not be aware. The Project Sponsors commit to establishing an Environmental Justice Community Group that would meet on a bi-annual basis, with the first meeting six months after Project implementation, to share updated data and analysis and hear about potential concerns.

ES-28 August 2022

EA CHAPTER/ ENVIRONMENTAL	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN	DATA SHOWN IN TABLE						POTENTIAL ADVERSE	MITIGATION AND ENHANCEMENTS	
CATEGORY				IABLE	Α	В	С	D	Е	F	G	EFFECT	
17 – Environmental Justice (Cont'd) dispra high a	Potential disproportionately high and adverse effects on taxi and FHV drivers	A potential disproportionately high and adverse effect would occur to taxi and FHV drivers in New York City, who largely identify as minority populations, in tolling scenarios that toll their vehicles more than once a day. This would occur in unmodified Tolling Scenarios A, D, and G; for FHV drivers, it would also occur in Tolling Scenarios C and E. The adverse effect would be related to the cost of the new CBD toll and the reduction of VMT for taxis and FHVs, which would result in a decrease in revenues that could lead to losses in employment.		Narrative	Potential adverse effect would occur in Tolling Scenarios A, D, and G, which would not have caps or exemptions for taxis and FHV drivers.								Mitigation needed for New York City taxi and/or FHV drivers if a tolling scenario is implemented with tolls of more than once per day for their vehicles. The Project Sponsors will work with the appropriate city and state
			Change in daily taxi/FHV VMT with passengers in the CBD relative to No Action Alternative: Scenarios included in EA	VMT with passengers in the CBD relative to No Action Alternative:	-21,498 (-6.6%)	+15,020 (+4.6%)	-11,371 (-3.5%)	-54,476 (-16.8%)	-25,621 (-7.9%)	+4,962 (+1.5%)	-27,757 (-8.6%)	Yes	agencies so that when passengers are present, they pay the toll, rather than the driver. TBTA will work with MTA NYCT to institute an Employment Resource Coordination Program to connect drivers experiencing job insecurity with a direct pathway to licensing, training, and job placement with MTA or its affiliated vendors at no cost to
				Tolls capped at 1x / Day: +2%	_	_	Tolls capped at 1x / Day: +3% Exempt: +50%	_	_	Tolls capped a 1x / Day: +2%		the drivers. For those who may not want a commercial driver's license, TBTA will coordinate with MTA NYCT to submit a request to the Federal Transit Administration for a pilot program that will help increase eligibility of taxi and FHV drivers to use their vehicles to provide paratransit trips, and will implement this program if approved.	

OVERALL PROJECT ENHANCEMENT. The Project Sponsors commit to ongoing monitoring and reporting of potential effects on the Project, including for example, traffic entering the CBD, vehicle-miles traveled in the CBD; transit ridership from providers across the region; bus speeds within the CBD; air quality and emissions trends; parking; and Project revenue. Data will be collected in advance and after implementation of the Project will be issued one year after implementation and then every two years. In addition, a reporting website will make data, analysis, and visualizations available in open data format to the greatest extent possible. Updates will be provided on at least a bi-annual basis as data becomes available and analysis is completed.

WHAT ARE THE PROJECT'S EFFECTS TO SECTION 4(f) PROPERTIES?

Section 4(f) of the U.S. Department of Transportation Act of 1966 (now 49 USC Section 303 and 23 USC Section 138) prohibits USDOT agencies, including FHWA, from approving any program or project that requires the "use" of any publicly owned parkland, recreation area, or wildlife and waterfowl refuge; or any land from a publicly or privately owned historic site of national, state, or local significance (collectively, Section 4(f) resources), unless: (1) there is no feasible and prudent avoidance alternative to the use of the land, and the action includes all possible planning to minimize harm to the Section 4(f) resource; or (2) the agency determines that the use of the property will have a *de minimis* impact.

A project uses a Section 4(f) property if it:

- Permanently incorporates land from the Section 4(f) property into a transportation facility;
- Temporarily occupies land that is part of a Section 4(f) property, such as during construction; or
- Results in a "constructive" use of the Section 4(f) property, where there is no permanent incorporation or temporary occupancy of land, but the proximity impacts (e.g., visual and noise) of a project are so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired.

A *de minimis* impact involves the use of Section 4(f) property that is generally minor in nature and results in no adverse effect to a historic site and no adverse effect to the activities, features, or attributes qualifying a park, recreation area, or refuge for protection under Section 4(f).

FHWA evaluated the Project's potential effects on Section 4(f) properties and determined that the CBD Tolling Alternative would not result in any use of Section 4(f) properties other than Central Park and the High Line for the following reasons:

- Central Park: Tolling system equipment is proposed on four poles at three detection locations on park roadways just inside the park near 59th Street. The equipment would be mounted on poles, replacing existing poles in the same locations and would prevent authorized vehicles from using the park to enter the Manhattan CBD without paying the toll. Because the Project Sponsors must have continued access to the poles for maintenance, FHWA intends to make a finding that the CBD Tolling Alternative would result in a de minimis impact on Central Park.
- High Line: The CBD Tolling Alternative would attach tolling system equipment to the High Line, a former railroad viaduct that now has a linear park on the former trackbed.²⁰ The tolling system equipment would be mounted beneath the trackbed structure on a metal pipe, bolted to the existing girders of the viaduct. No tolling infrastructure or tolling system equipment would be within or visible from the publicly accessible parkland that is atop the High Line. Because the Project Sponsors require permanent access to the tolling equipment attached to the underside of the High Line, FHWA intends to make a finding that the CBD Tolling Alternative would result in a de minimis impact on the High Line.

FHWA intends to make a finding that the CBD Tolling Alternative would result in a *de minimis* impact on Central Park and the High Line, and the officials with jurisdiction over these resources have concurred with this finding and the New York State Historic Preservation Office has concurred with FHWA's determination that there would be no adverse effect on Central Park as

a historic property. FHWA will consider any public input on its proposed finding during the public review period for this EA. **Chapter 19**, "**Section 4(f) Evaluation**," provides further detail and support of this finding.

ES-32 August 2022

ENDNOTES

- ¹ U.S. Census Bureau. American Community Survey, 2015-2019; U.S. Census Bureau, 2012–2016 Census Transportation Planning Package.
- ² U.S. Census Bureau, 2012–2016 Census Transportation Planning Package; New York State Comptroller. 2017. New York City's Office Market report; U.S. Census Bureau. American Community Survey, 2015 to 2019.
- ³ American Public Transportation Association. *2021 Public Transportation Fact Book*, Table 10. https://www.apta.com/wp-content/uploads/APTA-2021-Fact-Book.pdf
- ⁴ As of July 1, 2021, the estimated population of Los Angeles was 3,849,297. U.S. Census Bureau. Quickfacts.
- https://www.census.gov/quickfacts/fact/table/losangelescitycalifornia,losangelescountycalifornia,CA/PST045221.
- ⁵ New York Metropolitan Transportation Council. January 2021. *Hub Bound Travel Data Report 2019.* Transit includes subway, commuter rail, bus, ferry, and tram. NYMTC relies on passenger, vehicle, and bicycle counts to prepare the hub bound data, and these counts include work and non-work trips. Therefore, percentages of travel by mode vary from census data.
- https://www.nymtc.org/Portals/0/Pdf/Hub%20Bound/2019%20Hub%20Bound/DM_TDS_Hub_Bound_Travel_2019.pdf?ver=GS5smEoyHSsHsyX_t_Zriw%3d%3d.
- ⁶ As defined by the MTA Reform and Traffic Mobility Act, the Manhattan CBD consists of the geographic area of Manhattan south of and inclusive of 60th Street to the extent practicable but does not include the Franklin D. Roosevelt (FDR) Drive and the West Side Highway/Route 9A, including the Battery Park Underpass and any surface roadway portion of the Hugh L. Carey Tunnel that connects to West Street (the West Side Highway/Route 9A).
- ⁷ Merrian-Webster, "How did 'gridlock' move so quickly? https://www.merriam-webster.com/words-at-play/the-history-of-gridlock.
- ⁸ INRIX 2021 Global Traffic Scorecard. https://inrix.com/scorecard-city/?city=New%20York%20City%20NY&index=5.

content/uploads/2021-Q4-Ridership-APTA.pdf.

- MTA Subway and Bus Ridership for 2019. https://new.mta.info/coronavirus/ridership. Bus ridership reflects the total annual reported numbers for New York City Transit and MTA Bus Company.
 American Public Transportation Association. 2021 Public Transportation Fact Book, Table 10. https://www.apta.com/wp-content/uploads/APTA-2021-Fact-Book.pdf; American Public Transportation Ridership Report: Fourth Quarter 2021." https://www.apta.com/wp-content/uploads/APTA-2021-Fact-Book.pdf; American Public Transportation Ridership Report: Fourth Quarter 2021."
- ¹¹ Ernst & Young, LLP, *Economic impacts of the Metropolitan Transportation Authority's 2020-2024 Capital Investment Strategy.* Prepared for The Partnership of New York City. March 2019. https://pfnyc.org/wp-content/uploads/2020/01/MTA-Capital-Plan-2020-24-Econ-Impacts.pdf.
- ¹² MTA. October 1, 2019. *2020–2024 Capital Program: Executive Summary*. https://new.mta.info/sites/default/files/2019-09/MTA%202020-2024%20Capital%20Program%20-%20Executive%20Summary.pdf.
- ¹³ Ibid.
- ¹⁴ This reflects the portion of the capital program for transit improvements; it includes an additional \$254 million for other transit projects not identified here, as well as a December 2021 amendment that increased the transit- and rail-related portion of the program by \$535 million. The full capital program, including non-transit improvements, includes \$55.3 billion in projects.
- ¹⁵ MTA. October 1, 2019. 2020–2024 Capital Program: Executive Summary. https://new.mta.info/sites/default/files/2019-09/MTA%202020-2024%20Capital%20Program%20-%20Executive%20Summary.pdf.
- ¹⁶ In April 2019, the legislature passed the MTA Reform and Traffic Mobility Act that authorized TBTA to design, develop, build and operate the Project. Among the provisions, the Act requires that a Traffic Mobility Review Board (TMRB) be established to make recommendations on the toll rates as well as to develop recommendations on crossing credits, exemptions, or discounts. Refer to **Appendix 2B**, **"Project Alternatives: MTA Reform and Traffic Mobility Act."**

ES-34 August 2022

¹⁷ The travel demand modeling conducted for this EA and described in **Subchapter 4A**,

[&]quot;Transportation: Regional Transportation Effects and Modeling," included the bicycle lanes as part of the No Action Alternative but not the existing condition.

¹⁸ Ibid.

¹⁹ New bicycle lanes and bus lanes were incorporated in the transportation modeling conducted for this EA and described in **Subchapter 4A**, "**Transportation: Regional Transportation Effects and Modeling**," as appropriate.

²⁰ The High Line is also a historic property (i.e., eligible for listing on the National Register), but is exempt from consideration as a Section 4(f) resource as a historic property as a former railroad property (23 CFR 774.13).