CONGESTION RELIEF ZONE TOLLING FIRST EVALUATION REPORT

January 2026

mta.info

MTA Bridges & Tunnels

Contents

Abbreviations, Acronyms, Initialisms, and Commonly Used Terms

This report frequently uses shortenings, abbreviations, initialisms, and names that differ from legal names when referring to programs, organizations, projects, and place names.

Abbreviations, Acronyms, and Initialisms

ADT – Average daily traffic

BC – Black carbon

CBD – Central Business District

CRZ – Congestion Relief Zone

CUNY – the City University of New York

EJCG - Environmental Justice Community Group

FHV – For-Hire Vehicle

FHWA – Federal Highway Administration

GHG – Greenhouse gas

HVFHV – High-Volume For-Hire Vehicle

Final EA – Final Environmental Assessment

FHWA – Federal Highway Administration

FONSI – Finding of No Significant Impact

LIRR – Long Island Rail Road

MTA – Metropolitan Transportation Authority

MNR – Metro-North Railroad

NO – Nitric oxide

NO2 – Nitrogen dioxide

NOx – Nitrogen oxides

NYCCAS – New York City Community Air Survey

NYC DOT – New York City Department of Transportation

NYCEDC – New York City Economic Development Corporation

TLC – New York City Taxi and Limousine Commission

NYCT – New York City Transit

NYSDOT – New York State Department of Transportation

NYSERDA – New York State Energy Research and Development Authority

PM2.5 - Fine particulate matter with a diameter of 2.5 micrometers or less

PPB – Parts per billion

SBWG - Small Business Working Group

TBTA – Triborough Bridge and Tunnel Authority

UG/M3 – Micrograms per cubic meter of air

VMT – Vehicle miles traveled

Commonly Used Terms

Congestion Relief Zone (CRZ) Tolling

A term for the CBD Tolling Program, which charges vehicles for entering the Congestion Relief Zone (see below). CRZ tolling is also commonly referred to as "congestion pricing."

Congestion Relief Zone (CRZ)

The area where, upon entering, vehicles are charged under CRZ tolling. This area consists of Manhattan streets and avenues at or below 60th Street 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). The CRZ is the same as the central business district ("CBD"), as defined in the Traffic Mobility Act, Vehicle and Traffic Law § 1704(2). The CRZ is also the same area referred to as the Manhattan CBD in the Final EA, FONSI, and reevaluations for CRZ tolling.

Excluded Roadways

The FDR Drive and the West Side Highway/Route 9A south of 60th Street, 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). Vehicles that enter Manhattan below 60th Street on these roadways but that do not enter the CRZ are not subject to the CRZ toll.

MTA Bridges and Tunnels
The common name for TBTA, an affiliate agency of the Metropolitan Transportation Authority.

Project Sponsors
TBTA, NYSDOT, and NYC DOT, the agencies granted federal approval for Congestion Relief Zone tolling.

Acknowledgments

The preparation of this report required coordination among multiple agencies; in addition to TBTA and other MTA agencies, data and analysis were provided by NYC DOT, NYSDOT, and the NYC Health Department.

Message from the Chair and CEO

One year since its launch, there's no denying the positive impact of congestion pricing. In that time, this first-in-the nation urban area tolling program has helped Manhattan's central business district avoid an average of more than 2.1 million vehicle trips every month. That's enough cars to fill Central Park almost 100 times over, and their disappearance from city streets hasn't gone unnoticed — by local media and New Yorkers alike.

With data, the following report confirms what we've all been noticing: increased traffic speeds, faster peak commute times, surging transit ridership, quicker buses, and a humming regional economy. Importantly, it also shows that the program is on track to meet its revenue goals, unlocking billions of dollars for much-needed transit improvements like modern subway signals, electric buses, structural repairs, improved accessibility, and the next phase of the Second Avenue Subway into East Harlem.

This success wasn't guaranteed. Congestion pricing is a rare example of government taking a big swing on a complicated and highly controversial initiative and having it immediately pay off for constituents, with benefits that are obvious to everyone. It's not unlike the moment, over 20 years ago, when the City prohibited smoking in bars. The tabloid press was panicked ahead of Day One, but soon after, the ban was rightly recognized as a win. And just as it did on that issue back then, public opinion has shifted fast on congestion pricing.

New Yorkers are smart. They don't want to waste time in traffic. They want a better transit system. They want cleaner air and safer streets. Now these goals are finally within reach after 50 years of gridlock — gridlock that was bad for our economy, our health, and our quality of life.

We're not going back.

Janno Lieber
Chair and CEO

Executive Summary

On January 5, 2025, the Triborough Bridge and Tunnel Authority began tolling vehicles entering the Congestion Relief Zone (CRZ).

The data shared and analyzed in this report indicate:

11%
fewer vehicle entries between January and October

7.1%
fewer vehicle miles traveled in the CRZ from January and September

$468M
in net revenue raised through October and on track to generate over $500M in the first year

21+ million fewer vehicles entered the CBD between January 5, 2025 and October 31, 2025.

Vehicle speeds improved 4.6% YoY within the zone and on excluded roadways between January and October.

Vehicle speeds on crossings improved 23% YoY on average during the AM between January and October.

Taxi and FHV trips increased 1.4% within the CRZ from January through September.

Taxi/FHV vehicle miles traveled decreased 0.4% within the CRZ with paying passengers from January through August.

Bus speeds in the CRZ increased 2.3% YoY between January and September, reversing multiple years of declines.

Bus ridership increased 8% YoY on routes serving the CRZ between January and September.

Subway trips into the CRZ increased 9% YoY between January and September, continuing trends prior to the start of tolling.

There was no significant change in PM2.5, NO, NO2 levels around the region.

Total GHG emissions decreased 6.1% YoY in the CRZ between January and September.

The mitigation and enhancement measures committed to in the Final Environmental Assessment and Finding of No Significant Impact are completed or underway.

In total, these findings indicate that tolling vehicles entering the CRZ is meeting the objectives of the Central Business District Tolling Program with fewer adverse effects than predicted during the environmental review.

Introduction

What is Congestion Relief Zone tolling?

On January 5, 2025, the Triborough Bridge and Tunnel Authority (TBTA) began tolling vehicles entering the Congestion Relief Zone (CRZ). Established under the Traffic Mobility Act and authorized by the Federal Highway Administration through the Value Pricing Pilot Program (VPPP), the program is designed to reduce traffic congestion while generating revenue to support capital improvements to the transit system.

The program charges a toll on vehicles entering the CRZ, or the Manhattan streets and avenues at or below 60th Street apart from 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). For clarity, this report uses "CRZ" when referring to the legislated boundaries for tolling, "excluded roadways" when referring to the specific highways and underpasses not subject to tolling below 60th Street, and "CRZ and excluded roadways" when referring to the area inclusive of both. Additionally, the practice of tolling vehicles for entering the CRZ is referred to as CRZ tolling throughout this report.[1]

For more information on the specifics of how the program works and for the full tolling schedule, visit congestionreliefzone.mta.info.

What is the purpose of this report?

This report fulfills several reporting requirements outlined in the enabling legislation, the VPPP Agreement, the Final Environmental Assessment (EA), Finding of No Significant Impact (FONSI), and later reevaluations.[2] In addition to this report, TBTA makes available additional information through open datasets, interactive dashboards, press releases, and regular updates to the MTA Board. **Table 1-1** summarizes additional resources available to the public.

This report is required to be published one year after the commencement of operations, and every two years thereafter. As such, data included are for the periods where data were available at the time of preparation and do not fully cover the first twelve months of operations. The data presented are limited by the lag between when information becomes available and the time needed to complete review and analysis. As a result, the extent of coverage varies by section, with some chapters reflecting a greater portion of the first year than others. Where possible, historical comparisons are based on data beginning in

[1] The CRZ is the same as the Central Business District (CBD), as defined in the Traffic Mobility Act, Vehicle and Traffic Law § 1704(2). The CRZ is also the same area as the area referred to as the Manhattan CBD in the Final EA, FONSI, and reevaluations for CRZ tolling.
[2] The VPPP Agreement is the legal document between FHWA, NYSDOT, TBTA, and NYC DOT in which FHWA authorizes TBTA to operate the tolling program.

2022; however, some measures may be constrained by data availability. For the most current information, readers can consult the additional reporting sources noted in **Table 1-1**.

Table 1-1: Additional Sources for CRZ Tolling Program Reporting

Resource	Description
MTA Metrics	Interactive dashboards exploring datasets related to the CRZ Tolling Program. Available at https://metrics.mta.info/
NYS Open Data	Open datasets from MTA related to CRZ tolling. Available at https://data.ny.gov/
MTA Board Committee Books	Regular updates provided to the MTA Board in the Finance and Bridges & Tunnels committee books. Available at https://www.mta.info/transparency/board-and-committee-meetings
6-Month Air Quality Update	Report on air quality in and around the CRZ during the first three months of the program, published in partnership with NYC Health Department. Available at https://a816-dohbesp.nyc.gov/IndicatorPublic/data-stories/congestion-tolling-update/

What is in this report?

This report is organized into chapters by subject area. The outline below summarizes the chapters and highlights the key measures analyzed in each.

1. Traffic and Congestion
    a. Vehicle entries to the CRZ and excluded roadways
    b. Vehicle miles traveled within the CRZ and excluded roadways
    c. Vehicle speeds
2. Taxis and For-Hire Vehicles
    a. Taxi and for-hire vehicle (FHV) trips to, from, and within the CRZ and excluded roadways
    b. Vehicle miles traveled within the CRZ and excluded roadways by taxis and FHVs
3. Transit
    a. MTA bus speeds within the CRZ and excluded roadways
    b. Transit use entering the CRZ
    c. System-wide transit ridership for transit services providing service to the CRZ
4. Air Quality and Emissions
    a. Pollutants as measured in New York City as well as in nearby areas of New Jersey and Connecticut
    b. Estimated greenhouse gas emissions from vehicles driving in the CRZ and on the excluded roadways
5. Revenue and Expenses
    a. Project revenue and expenses
    b. Capital projects funded with tolling revenue
6. Mitigation and Monitoring

a. Updates on mitigation measures, as well as enhancements, related to environmental justice concerns.
b. Summary of progress to date on implementation of commitments to monitoring (and mitigation, if necessary) made in the Final EA and FONSI, VPPP Agreement and reevaluations for impacts on the transportation system

Traffic and Congestion

Congestion Relief Zone (CRZ) tolling is intended to reduce traffic congestion and generate revenue for capital improvements to MTA's transit system. Assessing traffic and congestion before and after the start of tolling relies, primarily, on two measures: changes in vehicle volumes and changes in vehicle miles traveled (VMT) in the CRZ. These measures are supplemented by analyses of vehicle speeds and traffic flows at key crossing points into the CRZ.

As with the rest of the report, the term CRZ refers to the legislated tolling boundaries, defined as Manhattan at, and south, of 60th Street, excluding the Franklin D. Roosevelt (FDR) Drive, the West Side Highway/Route 9A, and the surface roadway portion of the Hugh L. Carey Tunnel connecting to West Street.

Because the excluded roadways are specific to this program, historical data generally does not differentiate between entries into Manhattan at or below 60th Street that entered the CRZ and those that remained solely on the excluded roadways. Therefore, for accuracy in comparison, certain sections of this chapter combine CRZ entries and excluded roadway entries that did not enter the CRZ when comparing to historical data. These distinctions are illustrated in **Figure 2-1**.

Analysis indicates that, since the start of tolling, vehicle entries to the combined CRZ and excluded roadways and VMT within the CRZ have decreased, and speeds have improved, both within and approaching the CRZ and excluded roadways.

Figure 2-1: Entry Types to the CRZ and Excluded Roadways

Congestion Relief Zone Entries
Vehicles that enter the legislated tolling boundaries of Manhattan at or below 60th Street.

Excluded Roadway Entries
Vehicles that enter Manhattan below 60th Street but remain on an excluded roadway for the entirety of their trip.

CRZ + Excluded Roadway Entries
All vehicles that enter Manhattan at or below 60th Street, regardless of whether they enter the tolling area. Used for comparison to historical data.

Have vehicle entries declined since the start of CRZ tolling?

Establishing baselines using historical data

To assess the program's effect on vehicle entries, it is necessary to establish an estimate of how many vehicles would have entered the CRZ and excluded roadways in the absence of tolling. The New York Metropolitan Transportation Council (NYMTC) publishes an annual *Hub Bound Travel Data Report*, which provides a detailed analysis of travel to and from the CRZ and excluded roadways on a Wednesday in October (a "typical fall business day").[3] In those reports, entries include entries to the CRZ as well entries exclusively using the excluded roadways at or below 60th Street. Post-pandemic, daily vehicle entries to the CRZ and excluded roadways stabilized at about 640,000 in 2022 and 2023.[4]

Relying solely on October-based counts from the *Hub Bound Travel Data Reports* as a baseline for all months, however, risks overstating reductions during months with naturally lower traffic and understating them during months with higher traffic. Regular monthly variation in CRZ and excluded roadway entries is documented from historic crossing volumes at facilities that provide access to the CRZ.

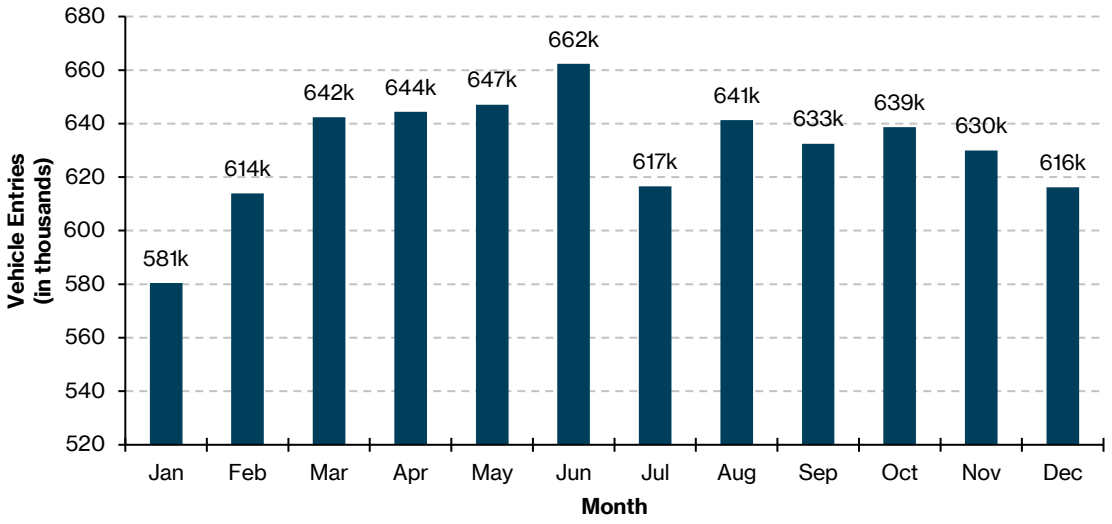
As such, monthly adjustment factors, accounting for these seasonal trends, were calculated to adjust October data and develop baselines appropriate for each month of the year. These adjustment factors were calculated from inbound vehicle volumes on bridges and tunnels in 2022, 2023, and 2024 as reported by the MTA, NYC DOT, and Port Authority of New York and New Jersey (PANYNJ).

These monthly adjustment factors were applied to the approximately 640,000 October entries from the NYMTC *Hub Bound Travel Data Report 2022* and *2023*. Additional adjustments for weekend entries were made to then produce a single daily average baseline for each month. These baselines are the expected average daily vehicle entries to the CRZ and excluded roadways per month had the toll not been implemented. **Figure 2-2**, below, describes these monthly average daily values.

[3] NYMTC, *Hub Bound Travel Data Report 2023*, p. 6, https://www.nymtc.org/Portals/0/Pdf/Hub%20Bound/2023%20Hub%20Bound/2023%20Hub%20Bound%20Report-%203.18.25.pdf?ver=7S_sDok5O_aw9bEN3A-NjA%3d%3d.

[4] NYMTC. *Hub Bound Travel Data Report 2022* and *2023*. https://www.nymtc.org/en-us/Data-and-Modeling/Transportation-Data-and-Statistics/Publications/Hub-Bound-Travel/; at the time of writing, NYMTC *Hub Bound Travel Data Report 2024* is not available.

Figure 2-2: Baseline Average Daily Entries to CRZ and Excluded Roadways by Month Without CRZ Tolling

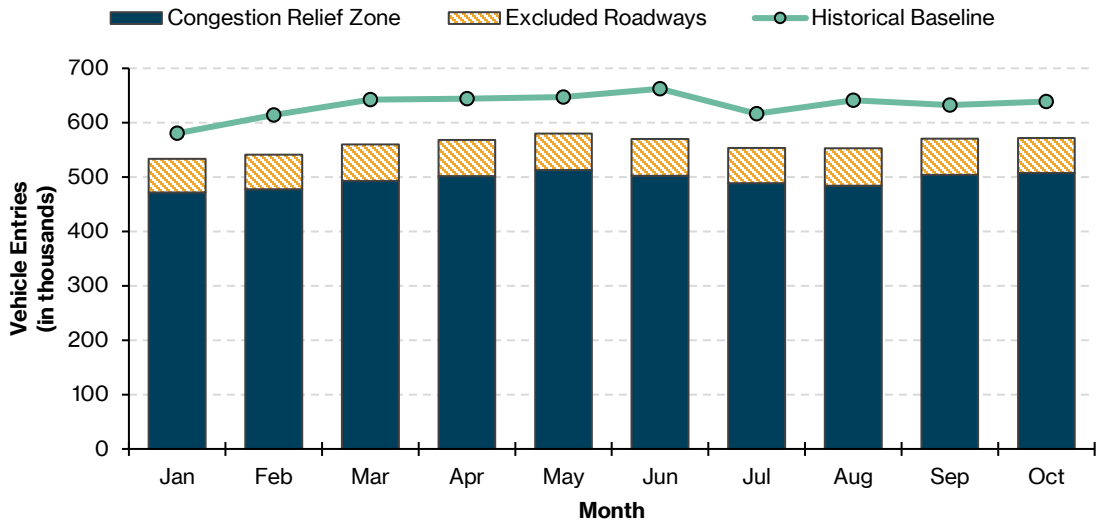


Reductions in vehicle entries

In every month since tolling began, average daily vehicle entries have been below the baseline. Between January and October, entries to the CRZ and excluded roadways are approximately 11 percent lower on average than the baseline. This represents an average reduction of approximately 2.16 million vehicles entering the CRZ and excluded roadways each month, totaling more than 21.5 million fewer entries between January 5, 2025, and October 31, 2025 than would have occurred without tolling.[5]

[5] MTA, MTA Congestion Relief Zone Vehicle Entries: Beginning 2025, data.ny.gov, Accessed October 2025 from https://data.ny.gov/d/t6yz-b64h.

Figure 2-3: Daily Average Vehicle Entries to CRZ and Excluded Roadways Compared to Baselines, January 5 through October 2025



Note: "Excluded Roadways" refers to vehicles that enter Manhattan south of 60th Street on the FDR Drive, West Side Highway, or through the Hugh L. Carey Tunnel, but do not enter the CRZ and are not subject to the CRZ toll.

Source: MTA, Congestion Relief Zone Vehicle Entries.

Table 2-1: Daily Average Vehicle Entries to CRZ and Excluded Roadways Compared to Baselines, January 5 through October 2025

Month	Average Daily Entries	Daily Baseline	Change from Baseline	Change from Baseline (%)	Total Fewer Entries
January 2025	533,525	580,500	-46,975	-8%	-1,268,325
February 2025	541,309	613,900	-72,591	-12%	-2,032,548
March 2025	560,255	642,500	-82,245	-13%	-2,549,595
April 2025	568,143	644,400	-76,257	-12%	-2,287,710
May 2025	580,226	647,200	-66,974	-10%	-2,076,194
June 2025	570,328	662,400	-92,072	-14%	-2,762,160
July 2025	553,293	616,600	-63,307	-10%	-1,962,517
August 2025	553,269	641,300	-88,031	-14%	-2,728,961
September 2025	570,357	632,500	-62,143	-10%	-1,864,290
October 2025	571,770	638,800	-67,030	-11%	-2,077,930
Total	-	-	-	-	-21,610,350

Note for Figure 2-3 and Table 2-1: Comparisons between entries after tolling began and the baselines include both trips into the CRZ and those made solely on the excluded roadways. Historical data available for calculating the baselines did not consistently differentiate between trips into the CRZ and those made solely on the excluded roadways.

Source: MTA, Congestion Relief Zone Vehicle Entries.

Changes in vehicle entry patterns over the course of the day

The tolling program sets different rates depending on the time of day, with Peak and Overnight periods. Overnight rates are set at 25 percent of the Peak rate. Peak hours are from 5:00 a.m. to 9:00 p.m. on weekdays and from 9:00 a.m. to 9:00 p.m. on weekends.

NYMTC's *Hub Bound Travel Data Report* provides data on historical weekday vehicle entries to the CRZ and excluded roadways by hour of the day. Additional counts conducted by TBTA and NYC DOT in Fall 2023 provide insight into weekend vehicle entries by hour of the day.

These data are compared to average vehicle entries in October 2025 to account for any seasonal effects in traffic patterns.

On Weekdays

Prior to CRZ tolling, weekday vehicle entries to the CRZ and excluded roadways follow a distinct pattern, with a sharp increase during the morning period (5:00 a.m. to 9:00 a.m.) driven by commuter traffic, a slight easing during midday, and a small uptick into the evening hours. After CRZ tolling, the general pattern remains the same, but with a decrease in entries at nearly all hours. Some hours have seen a greater reduction in both absolute and relative terms in comparison to historical data from the 2022 and 2023 *Hub Bound Travel Data Reports*.[6,7]

The first two hours of the peak toll period (5:00 a.m. to 7:00 a.m.) see the greatest reductions in entries. Evening reductions are also pronounced, with the final two hours of the peak toll period (7:00 p.m. to 9:00 p.m.) seeing nearly 20 percent reduction in entries.

The only hour of the day that saw any increase in vehicle entries was the hour before the peak toll rate begins (4:00 a.m. to 5:00 a.m.). In the evening, after the peak toll rate ends (9:00 p.m.) the reduction in entries promptly drops off but entries remain below historical values even in the overnight period.

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[6] NYMTC (March 2025), Hub Bound Travel Data 2023, https://www.nymtc.org/Portals/0/Pdf/Hub%20Bound/2023%20Hub%20Bound/2023%20Hub%20Bound%20Report-%203.18.25.pdf?ver=7S_sDok5O_aw9bEN3A-NjA%3d%3d.

[7] NYMTC (March 2024), Hub Bound Travel Data 2022, https://www.nymtc.org/Portals/0/Pdf/Hub%20Bound/2022%20Hub%20Bound/May%202022/2022%20Hub%20Bound%20Report-%205.17.24-FINAL%20corrected.pdf?ver=maKtK7lupDGBPWG3ZRuVIw%3d%3d

Figure 2-4a: Weekday Vehicle Entries to CRZ and Excluded Roadways by Hour of Day, 2022, 2023, and 2025

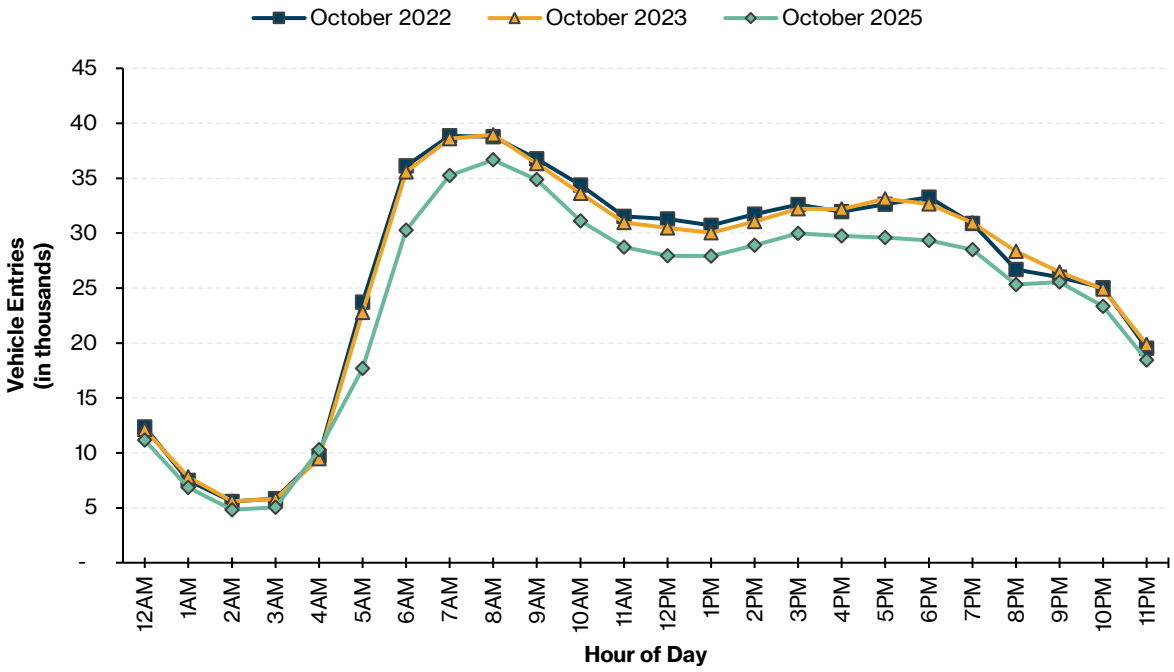
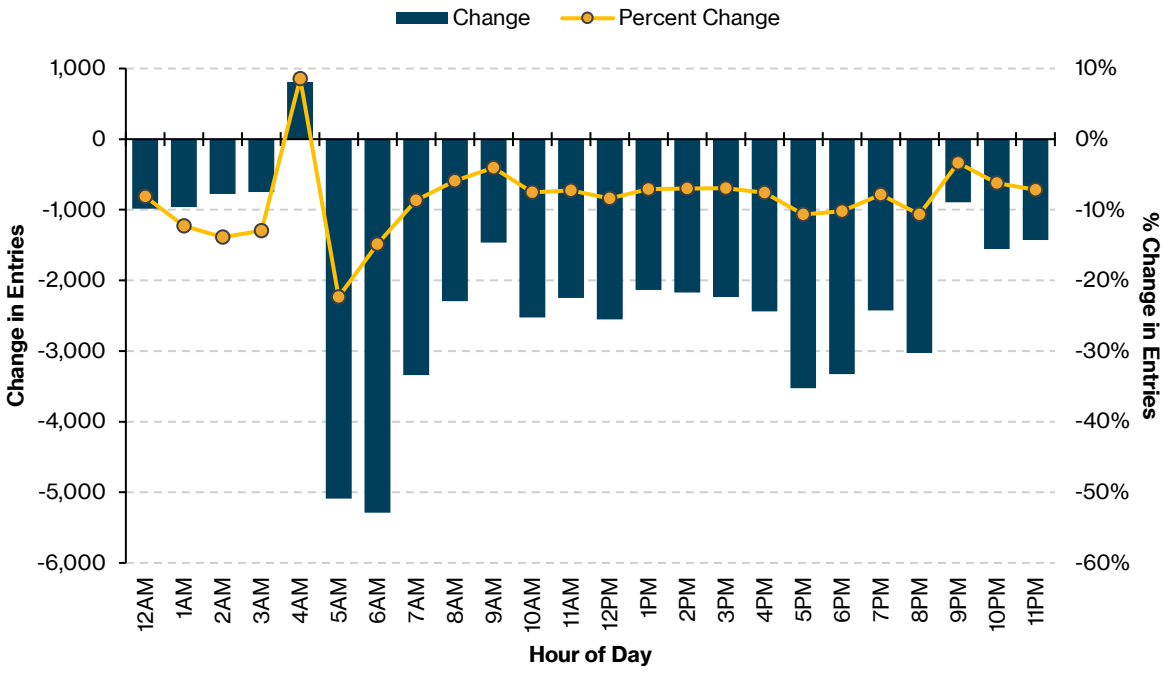


Figure 2-4b: Change in Weekday Vehicle Entries to CRZ and Excluded Roadways by Hour of Day, October 2025 Compared to October 2023



Note: Hours on the graph represent the subsequent hour in time (e.g. 6PM refers to 6:00 p.m. to 6:59 p.m.). Midweek days only (Tuesday, Wednesday, Thursday).

Source: NYMTC, Hub Bound Travel Data Report 2022 and 2023. MTA Congestion Relief Zone Vehicle Entries.

On Weekends

On weekends the hourly pattern of entries differs from weekdays. The sharp morning commuter peak is absent and instead volumes grow steadily throughout the day, reflecting the more discretionary nature of weekend travel. On weekends, reductions in entries are more concentrated in the afternoon (12:00 p.m. to 4:00 p.m.) and in the final two hours of the peak toll period (7:00 p.m. to 9:00 p.m.).

Figure 2-5a: Weekend Vehicle Entries to CRZ and Excluded Roadways by Hour of Day

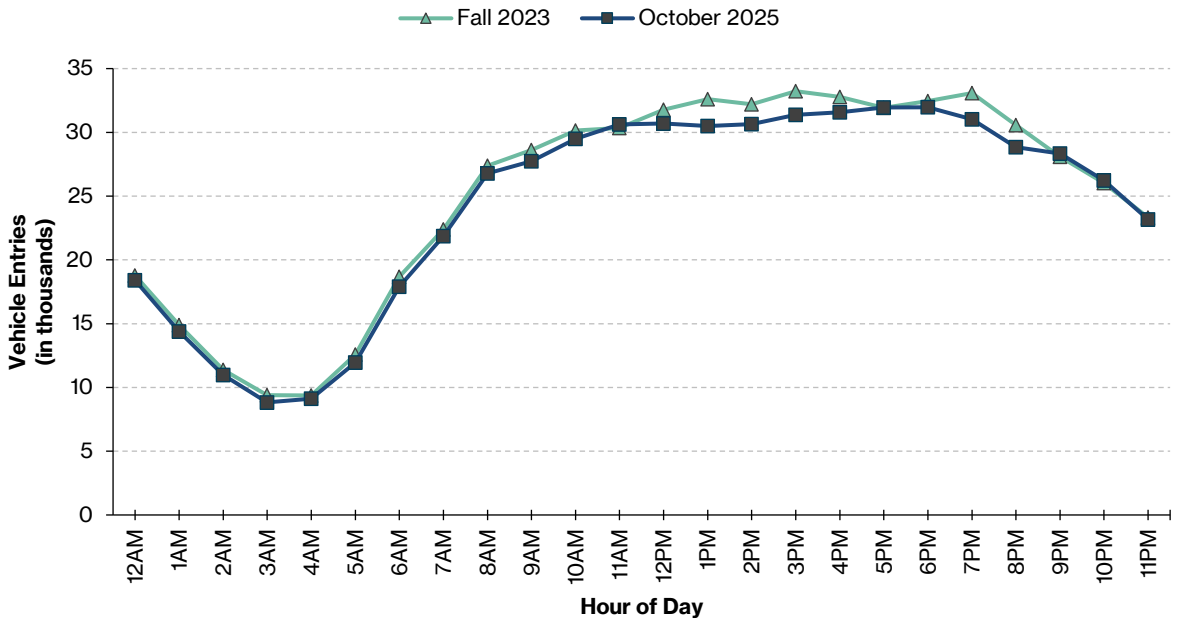
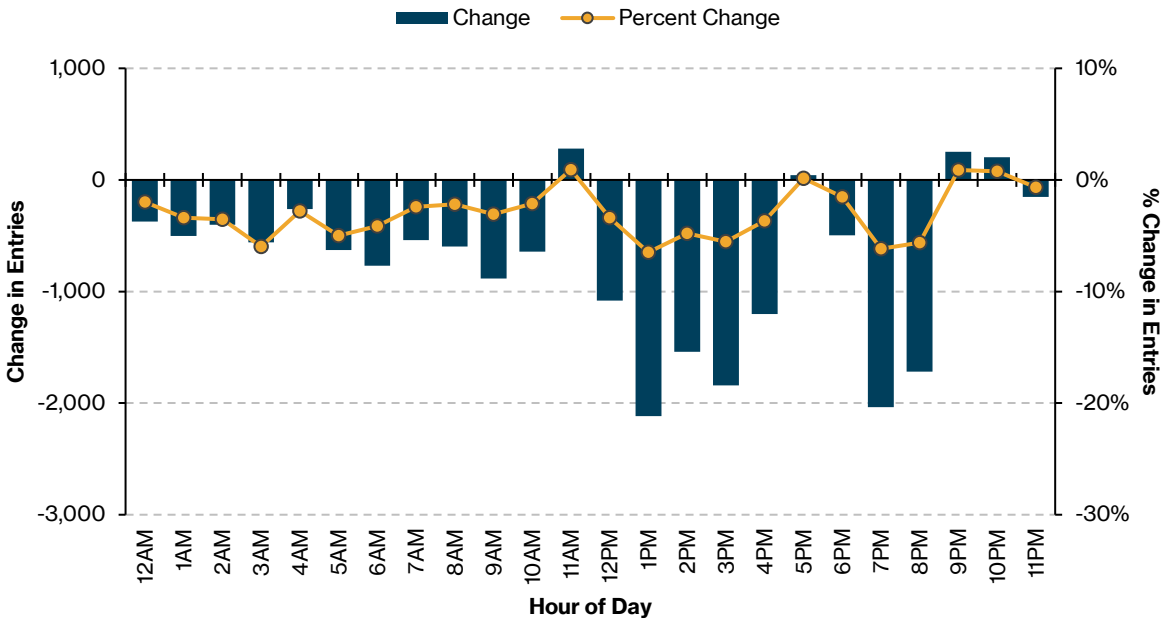


Figure 2-5b: Change in Weekend Vehicle Entries to CRZ and Excluded Roadways by Hour of Day, October 2025 Compared to October 2023



Note: Here, weekend is defined as 10 p.m. Friday through 10 p.m. Saturday, the period during which Fall 2023 counts were collected by TBTA and NYC DOT; NYMTC Hub Bound Travel Data Reports do not contain data for weekends. Hours on the graph represent the subsequent hour in time (e.g. 6PM refers to 6:00 p.m. to 6:59 p.m.).

Sources: TBTA and NYC DOT, Fall 2023 Vehicle Classification Counts; MTA, Congestion Relief Zone Vehicle Entries

Entries by time of day also show evidence of time-shifting, where drivers adjust their travel to avoid higher tolls, particularly around the start and end of the peak toll period. For example, in the comparison of hourly weekday entries in October 2025 to historical data (**Figure 2-4b**), entries during the 4:00 a.m. hour are higher than the historical data but then drop far below historical entries during the 5:00 a.m. hour, after the peak toll begins.

When vehicle entries are viewed in ten-minute intervals instead of hourly aggregates, the shift around the start and end of the peak toll period becomes more apparent. Similar, but weaker, patterns appear on weekends, when the peak toll period begins later in the day.

These effects appear limited to passenger vehicles. They are not observed for trucks or taxis and for-hire vehicles (FHVs) (see **Figure 2-6c** and **Figure 2-6d**).

Overall, this behavior indicates that users are adjusting in response to the tolling policy and by encouraging this temporal redistribution of entries, the toll is shifting traffic volumes to times when the street network has more spare capacity, leading to less overall congestion.

Figure 2-6a: Average Weekday Passenger Vehicle Entries to CRZ and Excluded Roadways in 10-Minute Increments, January 5 through October 2025

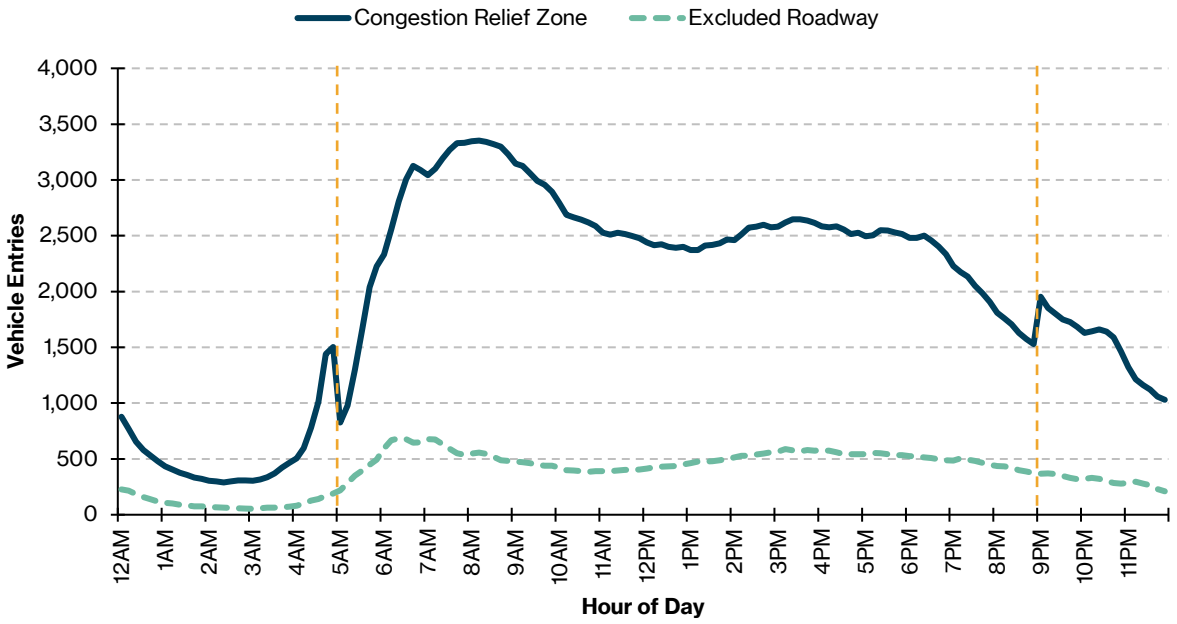


Figure 2-6b: Average Weekend Passenger Vehicle Entries to CRZ and Excluded Roadways in 10-Minute Increments, January 5 through October 2025

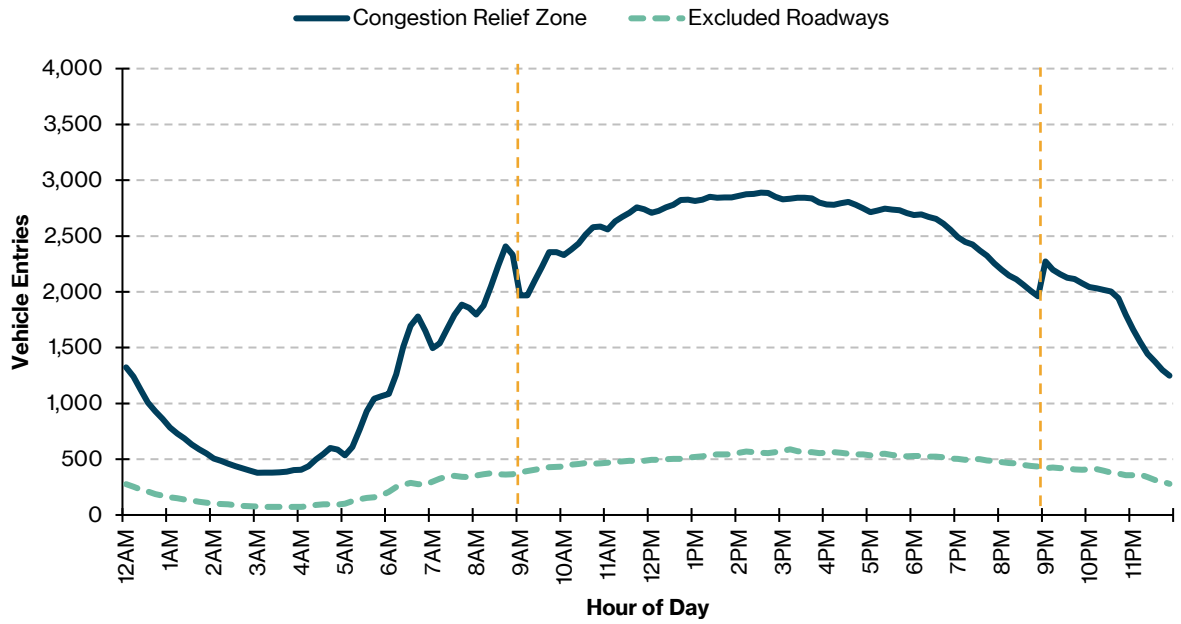


Figure 2-6c: Average Weekday Taxi/FHV Entries to CRZ and Excluded Roadways in 10-Minute Increments, January 5 through October 2025

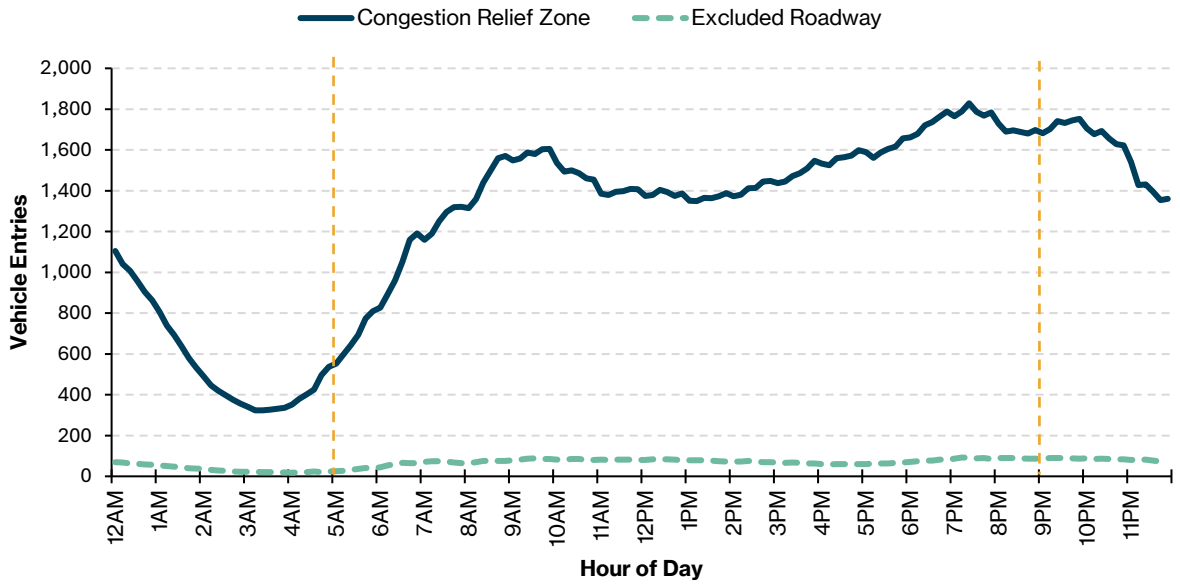
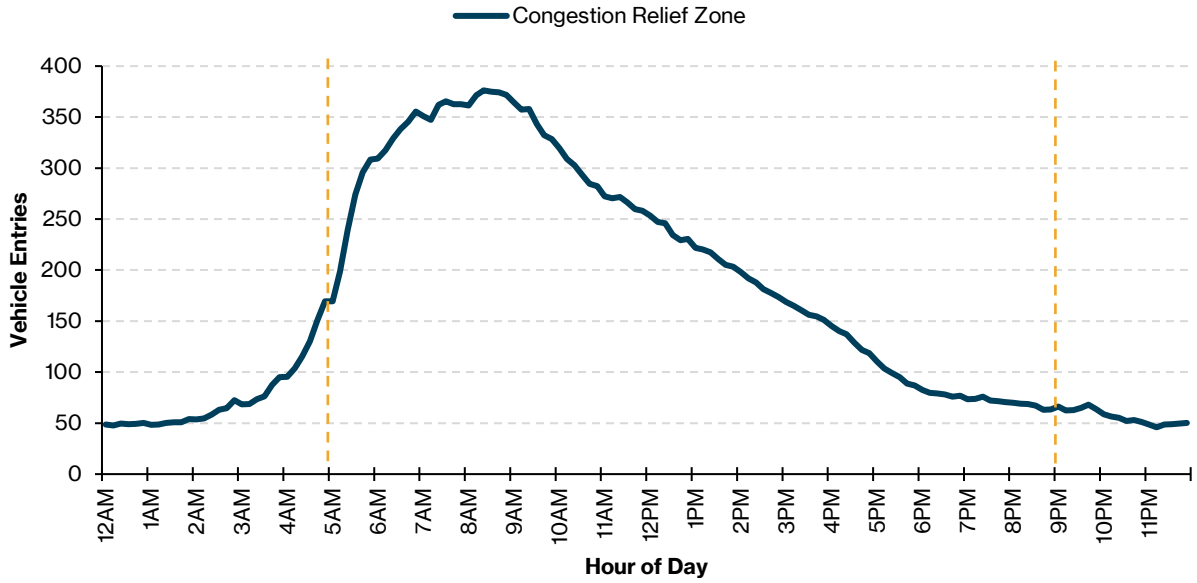


Figure 2-6d: Average Weekday Truck Entries to CRZ in 10-Minute Increments, January 5 through October 2025



Note: Passenger vehicles include cars, pickups, and vans, but not taxi/FHV vehicles registered with the New York City Taxi and Limousine Commission (TLC) and enrolled in the per-trip plan; dashed yellow lines indicate peak toll period start (5:00 a.m. weekdays, 9:00 a.m. weekends) and end (9 p.m. all days). Excluded Roadway trips by trucks are not shown because truck restrictions do not allow trucks to use the Excluded Roadways without entering the CRZ; trucks are not allowed on the FDR Drive nor on the West Side Highway north of 60th Street.

Source: MTA, Congestion Relief Zone Vehicle Entries.

The mix of vehicle types entering the CRZ and excluded roadways before and after CRZ tolling

Before the implementation of tolling, TBTA and NYC DOT conducted vehicle classification counts to measure the pre-implementation mix of vehicle types entering the CRZ and excluded roadways. Counts were taken on both fall weekdays and weekends in 2023.[8]

Prior to tolling, approximately two-thirds of weekday vehicle entries were passenger vehicles such as cars, pickups, and vans. Taxis and FHVs accounted for an estimated 27.5 percent of weekday entries. Trucks, both single-unit and articulated, comprised 3.8 percent, with buses comprising 1.8 percent of entries and motorcycles making up the remaining 1.1 percent.

Data from the tolling system between January 5 and September 30, 2025 indicates little change from these historical shares. The main difference is an increase in the share of taxis and FHVs, about 5 percentage points on weekdays (and about 3 percentage points on weekends), along with corresponding decreases in the share of passenger vehicles. Because historical class counts were taken in the fall, some of the observed differences may also reflect seasonal variation in traffic composition.[9] Additional information on taxi and FHV activity is provided in the **Taxi and FHVs** chapter.

Table 2-2: Share of Historical Entries to the CRZ and Excluded Roadways by Type of Vehicle, October 2023

Vehicle Class	Weekday CRZ	Weekday Excluded Roadways	Weekday CRZ + Excluded Roadways	Weekend CRZ	Weekend Excluded Roadways	Weekend CRZ + Excluded Roadways
Cars, Pickups and Vans	-	-	65.7%	-	-	63.9%
Trucks	-	-	3.8%	-	-	1.7%
Buses	-	-	1.8%	-	-	0.9%
Motorcycles/Mopeds	-	-	1.1%	-	-	0.8%
Taxi/FHV	-	-	27.5%	-	-	32.6%

Note: Classification counts are not available for the CRZ separate from the excluded roadways.

Source: TBTA and NYC DOT, Fall 2023 Vehicle Classification Counts.

[8] TBTA and NYC DOT, Fall 2023 Vehicle Classification Counts. Weekend counts were taken from 10 p.m. Friday through 10 p.m. Saturday.
[9] Historical classification counts also could not distinguish FHVs. Estimates were supplemented with location data maintained by NYC DOT, which does not include trips made when drivers were not logged into an app and omit traditional black car FHVs. As a result, historical data may slightly underrepresent the share of entries from these vehicles.

Table 2-3: Share of Vehicle Entries to the CRZ and Excluded Roadways by Type of Vehicle, January 5 through October 2025

Vehicle Class	Weekday CRZ	Weekday Excluded Roadways	Weekday CRZ + Excluded Roadways	Weekend CRZ	Weekend Excluded Roadways	Weekend CRZ + Excluded Roadways
Cars, Pickups and Vans	56.6%	84.3%	59.8%	58.4%	83.0%	61.4%
Trucks	4.8%	0.7%	4.3%	1.7%	0.5%	1.6%
Buses	1.9%	0.5%	1.7%	1.0%	0.1%	0.9%
Motorcycles/Mopeds	0.4%	0.2%	0.4%	0.4%	0.2%	0.3%
Taxi/FHV	36.3%	14.3%	33.8%	38.5%	16.2%	35.8%

Note: Buses include sightseeing buses, which are charged at the multi-unit truck rate.

Source: MTA, Congestion Relief Zone Vehicle Entries.

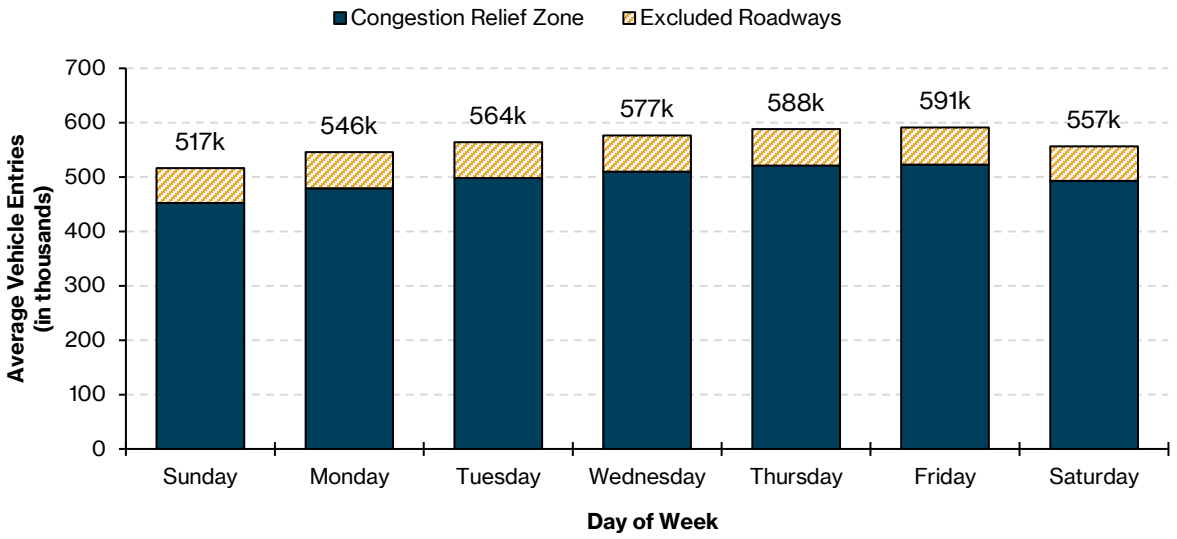
Tolling system data recorded approximately 23,800 trucks per day entering the CRZ and the excluded roadways on weekdays in October of 2025. Compared to pre-tolling baselines, this represents a modest decrease of approximately 500 fewer truck entries per day or a 2 percent reduction in truck entries compared to estimates of October of 2024.

Per the adopted toll schedule, licensed sightseeing buses are tolled at a higher rate than other buses. These vehicles are tolled at a rate equivalent to that of multi-unit trucks ($21.60 during peak hours and $5.40 during off-peak hours). Between January 5th and September 30th, there were an average of 85 entries per day by these types of vehicles. June through August saw the greatest number of entries from this vehicle class, at an average of 111 entries per day. No historical data source exists for entries by sightseeing buses prior to tolling.

How vehicle entries vary by day of the week

The tolling system provides granular, continuous data that affords the best picture into traffic entering the CRZ and excluded roadways. While direct comparison to historical data is not feasible given that entries to the CRZ and excluded roadways by day of week have not been counted in the past, these data illustrate how vehicle traffic into the CRZ and excluded roadways varies by day of week and how those variations also shift throughout the year, with tolling in place.

Figure 2-7: Average Daily Vehicle Entries to CRZ and Excluded Roadways by Day of Week, January through October 2025



Note: Federal holidays excluded.
Source: MTA, Congestion Relief Zone Vehicle Entries.

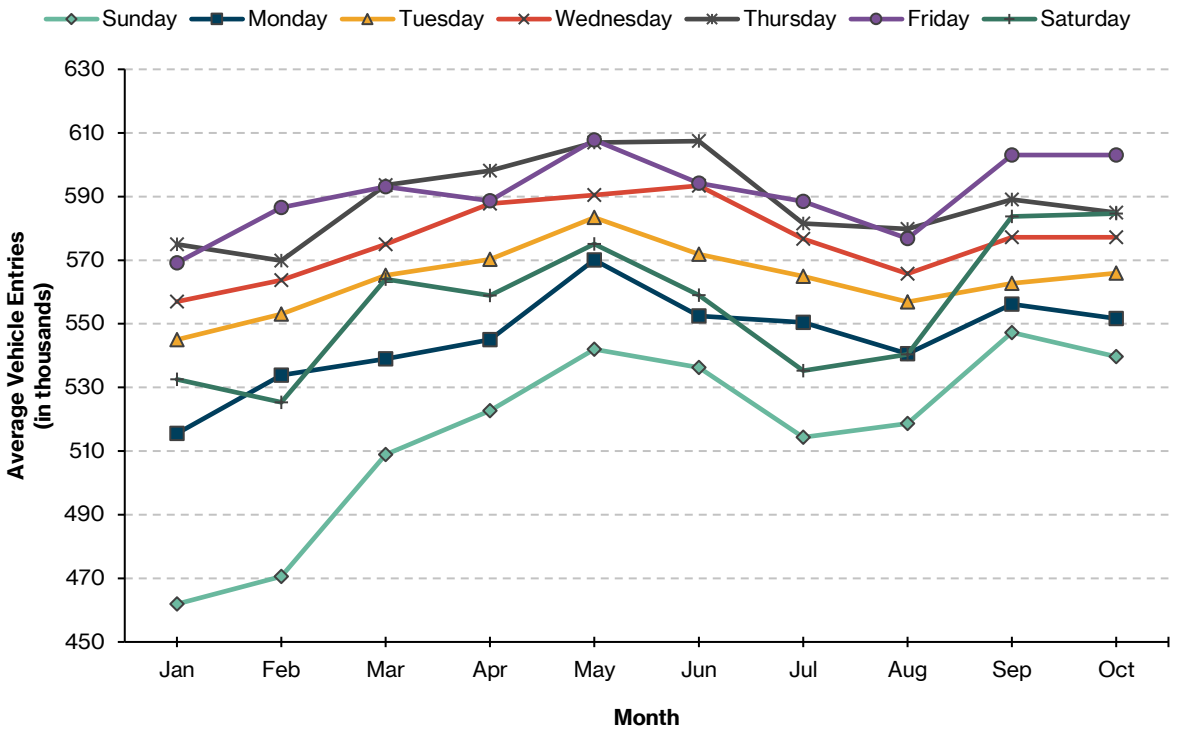
Between January 5, 2025 and October 31, 2025, Fridays had the highest average daily entries at 591,478, followed closely by Thursdays at 588,363 average daily entries. Mondays had the lowest weekday average entries at 545,779. These patterns in **Figure 2-7** suggest commuting demand is strongest Tuesday through Thursday, while Friday entries likely include both commuters and additional evening trips.

As for weekends, Saturdays averaged 556,722 entries during the same period. Sundays had the lowest overall daily average at 516,573.

Weekends were also far more variable than weekdays. Excluding federal holidays, average vehicle entries on Sundays show the widest fluctuation, with a standard deviation of more than 29,000 entries. Saturday followed with a standard deviation of about 21,000. By contrast, weekday variation averages around 12,000.

Much of this variation in weekend entries was driven by a large increase in average daily entries between January and October (see **Figure 2-8**). While overall the average percentage change in entries between January and October was 7 percent, Sundays saw a 17 percent increase (or 85,000 more entries).

Figure 2-8: Average Vehicle Entries to the CRZ and Excluded Roadways by Day of Week and Month



Note: Federal holidays excluded.
Source: MTA, Congestion Relief Zone Vehicle Entries.

How has the total amount of driving in the CRZ changed since tolling began?

The total amount of driving, or VMT, is another measure for assessing traffic and congestion; it is the distance traveled by each vehicle driving in the CRZ added together. All measures of VMT are estimates since no comprehensive source exists for location data from all vehicles. State departments of transportation report estimated VMT by extrapolating from counts of vehicles at points across the road network; NYSDOT provides VMT estimates for all New York counties but not smaller areas like the CRZ.

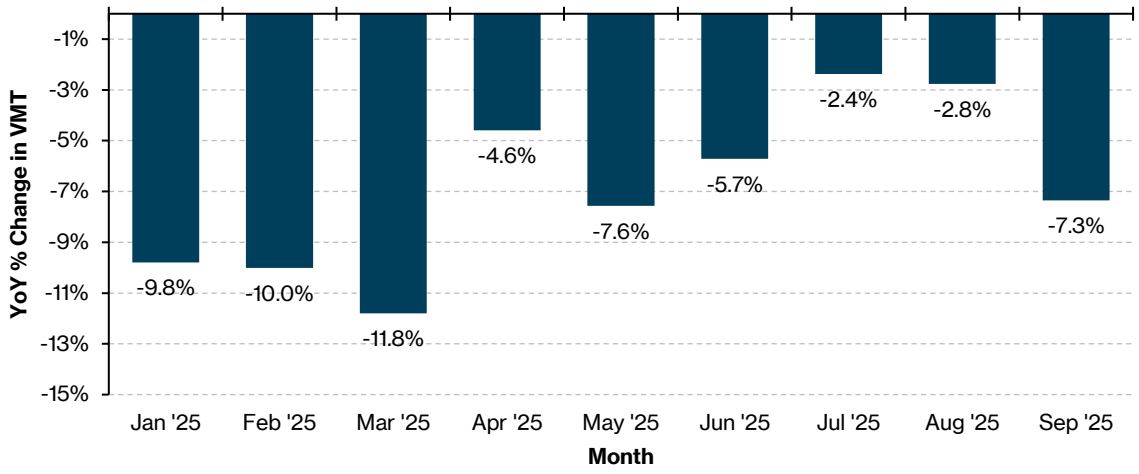
The VMT estimates presented here are provided by StreetLight Data, Inc., a transportation data company. StreetLight supplies estimated average daily traffic volumes for individual road segments, which can be aggregated to produce a total average daily VMT estimate for the CRZ. StreetLight Data, Inc. generates two models with different characteristics and data sources to create two estimates of VMT: one known as aggregated GPS (AGPS), and another known as connected vehicle data (CVD). **Table 2-4** presents the average daily VMT from each model for each month from January 2024 through September 2025. The table also provides average daily VMT for the January through September period in each year. To estimate changes in VMT within the CRZ, StreetLight Data, Inc. recommended calculating the percent change in average daily VMT using the AGPS model, calculating the percent change using the CVD model, and then averaging the percent changes from the two models.

Compared to 2024, estimated average daily VMT in the CRZ from January through September 2025 was 7.1 percent lower than same period in 2024. Including the excluded roadways, tunnels, and bridges connecting to the CRZ, estimated average daily VMT declined by 5.8 percent, year over year, for January through September.[10]

As seen in **Figure 2-9**, the largest estimated decrease in average daily VMT was from March 2024 to March 2025 at 11.8 percent; the smallest year-over-year estimated decreases were in July and August at 2.4 percent and 2.8 percent, respectively.

Table 2-4 includes estimated average daily VMT values for each month indexed to the value for January 2024 with the January 2024 estimated average daily VMT set to 100; the January-through-September 2025 estimated average daily VMT is indexed to the estimated average daily VMT for the same period in 2024. **Figure 2-10** depicts the downward trend in estimated VMT after the start of CRZ tolling.

Figure 2-9: Average Year-over-Year Percent Change in Daily VMT in the CRZ

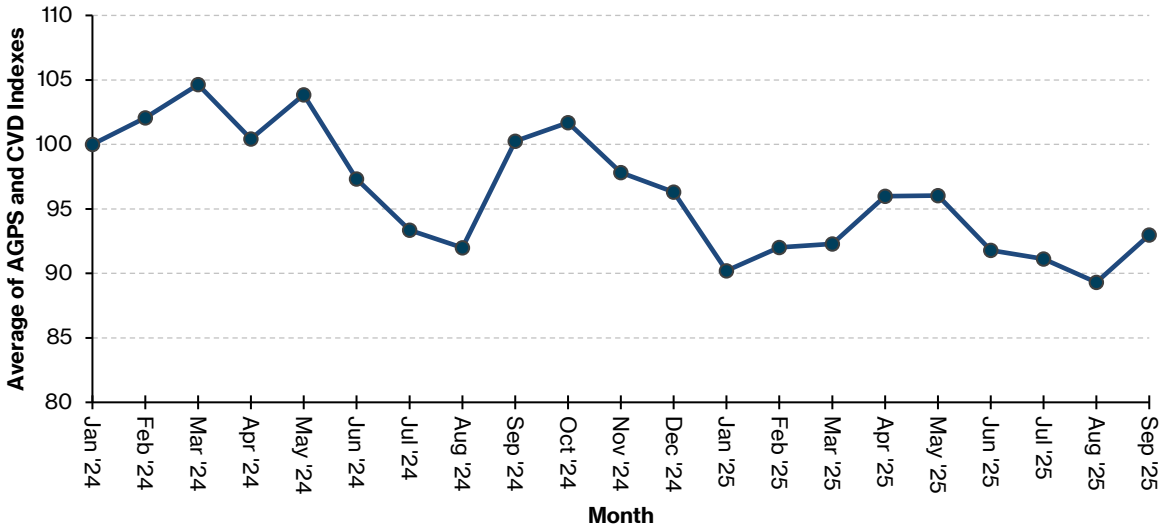


Sources: StreetLight Data, Inc., TBTA.

Indexed daily VMT is calculated by dividing each month's daily VMT by the baseline VMT, January 2024. For the nine-month aggregated index, the baseline is the average VMT from January through September 2024. This index is helpful for understanding VMT trends over time. Compared to 2024, indexed VMT decreased by an average of 7 points in the CRZ, 4 points on excluded roadways, and 4 points on the crossings. Overall indexed VMT across these areas decreased by 6 points. **Figure 2-10** shows the indexed average VMT in the CRZ.

[10] Modeled estimates of VMT for the alternatives and scenarios studied in the Final EA and for the adopted tolling scenario and phase-in approach in the re-evaluations for "the CBD" included the CRZ, the excluded roadways, and these crossings. A combined estimate for all these areas is presented here, as well.

Figure 2-10: Indexed Average Daily VMT in the CRZ



Sources: StreetLight Data, Inc., TBTA.

Table 2-4: Monthly Average Daily VMT Estimates and Indexed VMT, January 2024 through September 2025

Year	Month	CRZ Daily AGPS	CRZ Daily CVD	CRZ Indexed AGPS	CRZ Indexed CVD	CRZ Indexed Avg	Excluded Highways Daily AGPS	Excluded Highways Daily CVD	Excluded Highways Indexed AGPS	Excluded Highways Indexed CVD	Excluded Highways Indexed Avg	Crossings Daily CVD	Crossings Indexed Avg	CRZ+ Excluded+ Crossings Daily AGPS	CRZ+ Excluded+ Crossings Daily CVD	CRZ+ Excluded+ Crossings Indexed AGPS	CRZ+ Excluded+ Crossings Indexed CVD	CRZ+ Excluded+ Crossings Indexed Avg
2024	1	3,050,435	2,789,692	100	100	100	1,486,390	1,249,564	100	100	100	599,384	100	5,136,209	4,638,640	100	100	100
2024	2	3,195,555	2,772,255	105	99	102	1,556,553	1,285,875	105	103	104	603,969	101	5,356,077	4,662,099	104	101	102
2024	3	3,189,275	2,921,227	105	105	105	1,577,464	1,317,511	106	105	106	637,903	106	5,404,642	4,876,641	105	105	105
2024	4	3,214,656	2,662,481	105	95	100	1,600,241	1,198,445	108	96	102	588,748	98	5,403,645	4,449,674	105	96	101
2024	5	3,271,697	2,801,461	107	100	104	1,621,938	1,274,902	109	102	106	620,635	104	5,514,270	4,696,998	107	101	104
2024	6	3,176,787	2,525,409	104	91	97	1,593,832	1,195,650	107	96	101	587,192	98	5,357,811	4,308,251	104	93	99
2024	7	3,068,294	2,402,474	101	86	93	1,534,634	1,100,772	103	88	96	553,268	92	5,156,196	4,056,514	100	87	94
2024	8	3,063,860	2,329,990	100	84	92	1,503,885	1,089,580	101	87	94	547,935	91	5,115,680	3,967,505	100	86	93
2024	9	3,147,006	2,715,646	103	97	100	1,550,719	1,207,505	104	97	100	608,212	101	5,305,937	4,531,363	103	98	100
2024	10	3,191,490	2,754,403	105	99	102	1,662,210	1,232,111	112	99	105	604,261	101	5,457,961	4,590,775	106	99	103
2024	11	3,109,697	2,613,366	102	94	98	1,559,520	1,223,576	105	98	101	590,475	99	5,259,692	4,427,417	102	95	99
2024	12	3,099,502	2,538,866	102	91	96	1,534,840	1,189,283	103	95	99	580,333	97	5,214,675	4,308,482	102	93	97
2025	1	3,008,760	2,281,069	99	82	90	1,460,211	1,085,020	98	87	93	514,619	86	4,983,590	3,880,708	97	84	90
2025	2	3,052,351	2,341,778	100	84	92	1,500,192	1,141,896	101	91	96	568,455	95	5,120,998	4,052,129	100	87	94
2025	3	3,090,801	2,322,250	101	83	92	1,545,149	1,178,403	104	94	99	597,274	100	5,233,224	4,097,927	102	88	95
2025	4	3,175,416	2,450,759	104	88	96	1,578,436	1,156,819	106	93	99	580,259	97	5,334,111	4,187,837	104	90	97
2025	5	3,078,516	2,543,028	101	91	96	1,580,070	1,218,148	106	97	102	596,369	99	5,254,955	4,357,545	102	94	98
2025	6	3,000,476	2,376,808	98	85	92	1,554,771	1,161,458	105	93	99	591,282	99	5,146,529	4,129,548	100	89	95
2025	7	2,984,713	2,354,094	98	84	91	1,494,867	1,086,871	101	87	94	571,203	95	5,050,783	4,012,168	98	86	92
2025	8	2,928,397	2,304,403	96	83	89	1,486,331	1,063,195	100	85	93	559,534	93	4,974,262	3,927,132	97	85	91
2025	9	3,001,067	2,442,515	98	88	93	1,550,815	1,165,993	104	93	99	568,985	95	5,120,867	4,177,493	100	90	95
2024	**Jan - Sep**	**3,152,463**	**2,657,269**	**100**	**100**	**100**	**1,558,166**	**1,212,922**	**100**	**100**	**100**	**594,060**	**100**	**5,304,690**	**4,464,251**	**100**	**100**	**100**
2025	**Jan - Sep**	**3,035,170**	**2,379,569**	**96**	**90**	**93**	**1,527,808**	**1,139,494**	**98**	**94**	**96**	**571,947**	**96**	**5,134,924**	**4,091,010**	**97**	**92**	**94**

Note: Estimated average daily VMT for the crossings to the CRZ are from StreetLight Data, Inc.'s CVD model, as StreetLight Data, Inc. found that the AGPS model produced unreliable estimates for these bridges and tunnels.

Sources: StreetLight Data, Inc., TBTA.

Have speeds improved in the CRZ and on the crossings to the CRZ?

Traffic speeds help describe how congestion has changed since the start of tolling. Traffic speeds are a result of a complex interplay between two components. One is the space available for vehicles, referred to as "network capacity," which can be affected by a variety of factors such as construction, crashes, pedestrian volumes, double-parked cars and trucks, street redesigns, street closures, and more. The other component is the volume of vehicles on the road network. Since an objective of the tolling program is to reduce the number of vehicles entering the CRZ, it is the vehicle volume component of speed that the tolling program may affect.

Speed data in this section is sourced from HERE Technologies and uses GPS probe data from connected vehicles, navigation systems, fleet telematics systems, or mobile devices to estimate speeds every hour for all roads in the New York City metropolitan region.

Speeds on crossings

Roadways leading into the CRZ on bridges and tunnels provide the clearest picture of how traffic speeds have improved since tolling began, since they have fewer external factors, such as pedestrians crossing streets and double-parking impacting network capacity as compared to surface streets.

Since tolling began, through October 2025, average speeds on crossings entering the CRZ during the weekday morning commute (6:00 a.m. to 10 a.m.) from New Jersey, Brooklyn, and Queens have all improved, by an average of 23 percent compared to 2024. The biggest improvements have been at the Holland Tunnel, Williamsburg Bridge, and Ed Koch Queensboro Bridge.

Table 2-5: Average Crossing Speeds During Weekday AM Commute (6AM – 10AM), January through October, 2024 vs 2025

Crossing	2024 Average Speed (MPH)	2025 Average Speed (MPH)	% Change in Speed
Brooklyn Bridge WB	20.1	23.2	15.0%
Holland Tunnel EB	10.8	16.2	51.0%
Hugh L. Carey Tunnel WB	21.5	23.8	10.8%
Lincoln Tunnel EB (South Tube)	10.5	13.1	24.7%
Manhattan Bridge WB	23.2	24.8	6.7%
Queensboro Bridge WB (Lower Level)	12.2	15.7	29.3%
Queens-Midtown Tunnel WB	15.7	18.6	18.4%
Williamsburg Bridge WB	12.5	16.0	28.3%
All Crossing Average	15.4	18.6	23.0%

Note: All locations measured in the inbound direction (WB = Westbound and EB = Eastbound).

Source: HERE Technologies, Traffic Analytics Data.

Improved traffic conditions have also been observed on some major arterial routes beyond the immediate crossing points. These corridors serve a wider range of regional travel needs, not just access to the CRZ, but they have still seen measurable gains in speed. For example, from January through October, during the morning peak period (6:00 a.m. to 10:00 a.m.), the following routes recorded higher average speeds in 2025 compared with 2024:[11]

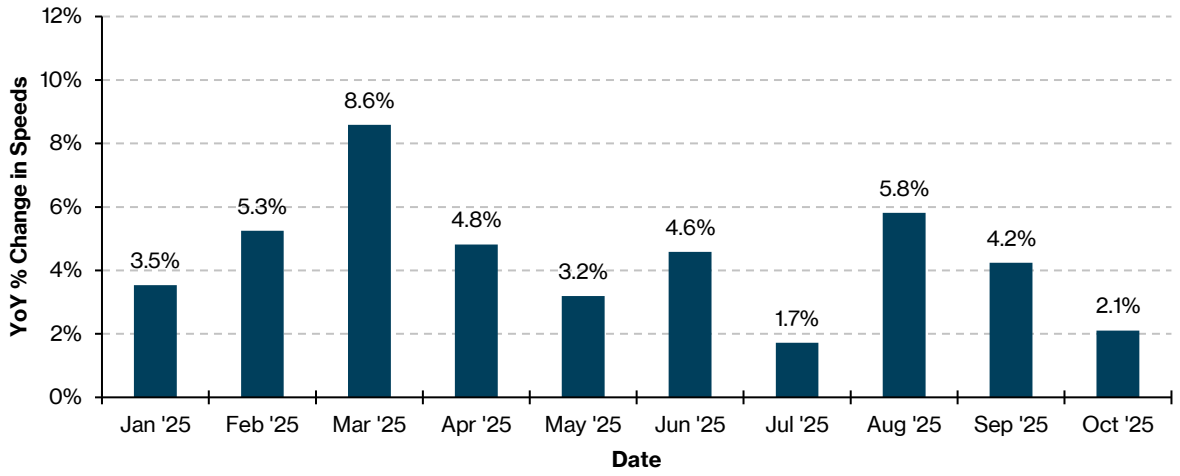
- **Gowanus Expressway (I-278) Northbound** saw a 7 percent increase between the Verrazzano-Narrows Bridge and the Hugh L. Carey Tunnel
- **Route 495 Eastbound** saw a 15 percent increase between the New Jersey Turnpike and the Lincoln Tunnel entrance
- **Flatbush Avenue Northbound** saw a 6 percent increase between Grand Army Plaza and the Manhattan Bridge

Vehicle speeds within the CRZ and excluded roadways

In addition to the improved speeds on roads leading to the CRZ, speeds have also increased on roads within the CRZ and on the excluded roadways. Overall, between January and October 2025, average speeds during peak toll hours increased by 4.6 percent compared to the same period in 2024.

Average weekday speeds (shown in **Figure 2-11**) during peak toll hours increased by 4.0 percent during the same period. March 2025 saw the greatest speed improvements in weekday speeds with speeds up 8.6 percent year-over-year.

Figure 2-11: Year-over-Year Change in Average Weekday Speeds in the CRZ and Excluded Roadways

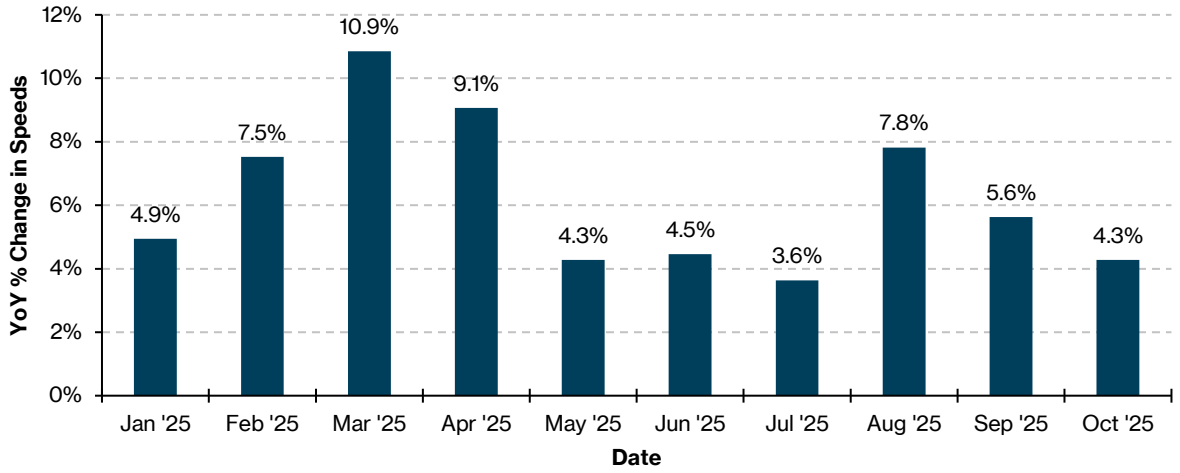


Note: Peak toll hours only (5:00 a.m. to 9:00 p.m.). January 2025 includes January 1st-4th, which is before tolling was implemented.
Source: HERE Technologies, Traffic Analytics Data.

[11] MTA analysis of HERE Technologies, Traffic Analytics Data.

Weekend speeds (shown in **Figure 2-12**) experienced an even greater increase in average speeds after tolling began. Between January 2025 and October 2025, weekend speeds during peak toll hours increased by 6.2 percent on average compared to the previous year. March 2025 again saw the greatest speed improvements, with weekend speeds up 10.9 percent year-over-year. **Table 2-6** provides the average weekday and weekend speeds for each month in miles per hour.

Figure 2-12: Year-over-Year Change in Average Weekend Speeds in the CRZ and Excluded Roadways



Note: Peak toll hours only (9:00 a.m. to 9:00 p.m.). January 2025 includes January 1st-4th, which is before tolling was implemented.
Source: HERE Technologies, Traffic Analytics Data.

Table 2-6: Average Speeds and Year-Over-Year Change, CRZ and Excluded Roadways

Month	Weekday Average Speed (mph)	Weekday YoY % Change	Weekend Average Speed (mph)	Weekend YoY % Change
January 2024	9.1		9.2	
February 2024	8.7		8.9	
March 2024	8.4		8.6	
April 2024	8.4		8.5	
May 2024	8.1		8.7	
June 2024	8.2		8.8	
July 2024	8.5		9.3	
August 2024	8.6		8.8	
September 2024	7.9		8.1	
October 2024	8.1		8.1	
November 2024	8.3		8.1	
December 2024	7.8		7.8	
January 2025	9.4	3.5%	9.6	4.9%
February 2025	9.1	5.3%	9.5	7.5%
March 2025	9.1	8.6%	9.6	10.9%
April 2025	8.9	4.8%	9.3	9.1%
May 2025	8.3	3.2%	9.0	4.3%
June 2025	8.5	4.6%	9.2	4.5%
July 2025	8.6	1.7%	9.7	3.6%
August 2025	9.1	5.8%	9.5	7.8%
September 2025	8.3	4.2%	8.5	5.6%
October 2025	8.3	2.1%	8.4	4.3%

Note: Peak toll hours only (5:00 a.m. to 9:00 p.m. on weekdays and 9:00 a.m. to 9:00 p.m. on weekends). January 2025 includes January 1st-4th, which is before tolling was implemented.
Source: HERE Technologies, Traffic Analytics Data.

Truck Speeds

These improvements in speeds not only benefit commuters but also truck drivers in the CRZ and on the excluded roadways. Analysis of truck-specific speed data from the National Performance Management Research Dataset (NPMRDS) indicates average truck speeds have also increased since tolling began. Specifically, between January and October, truck speeds on roads in and around the CRZ have improved by an average of 5.6 percent year-over-year.[12]

[12] NYC DOT, National Performance Management Research Data Set (NPMRDS) for Roadways intersecting the CRZ, Accessed November 2025 from https://npmrds.ritis.org/analytics/.

Conclusion

Overall, these initial months of data indicate that traffic and congestion have improved in and around the CRZ since the start of tolling. Traffic volumes entering the CRZ have declined, total vehicle miles traveled have fallen, and average speeds have improved both within and approaching the CRZ.

Taxis and FHVs

Under the tolling schedule, taxis and for-hire vehicles (FHVs) are eligible for the Per-Trip Charge Plan (PTCP), allowing them to pay a smaller fee per trip in the Congestion Relief Zone (CRZ) instead of the daily toll. Under this plan, trips by High-Volume FHV companies (Uber and Lyft) are charged $1.50 per CRZ trip, while yellow and green taxis and other FHVs are charged $0.75. These charges are collected from passengers and remitted to the MTA.[13]

This chapter focuses on High-Volume FHVs (HVFHVs) and yellow taxis, as these services not only provide the most complete and reliable data but also account for most taxi and FHV activity within the CRZ. Standard FHVs are excluded from detailed breakouts due to significant gaps in pickup and drop-off location data. Green taxis are included where data are available, however, their contribution to overall trip volume is minimal, as they are restricted to drop-offs and are prohibited from picking up within the CRZ.

To understand the impact of the program on taxis and FHVs, this chapter analyzes the number of trips completed to, from, and within the CRZ together with the excluded roadways, as well as the vehicle miles traveled by taxis and FHVs. Taxi and FHV data from the New York City Taxi and Limousine Commission (TLC) do not allow for analysis of the CRZ separate from the excluded roadways, nor do those data capture trips passing through the CRZ that do not begin or end in it.

The analysis finds that since tolling began, the number of CRZ-related taxi and FHV trips rose modestly in 2025 from January through September compared with the same period in 2024, while total vehicle miles traveled in the CRZ and excluded roadways is relatively flat year-over-year. Shifts in the composition of service providers, described in more detail throughout this chapter, appear to be driven by a changing landscape for the industry that predated the tolling program.

Has the number of taxis and FHVs making trips to, from, and within the CRZ and excluded roadways changed?

Using location data submitted to the TLC, NYC DOT conducted an analysis of the number of unique, active TLC vehicles, or vehicles that made at least one trip that entered the CRZ or excluded roadways in the given month.

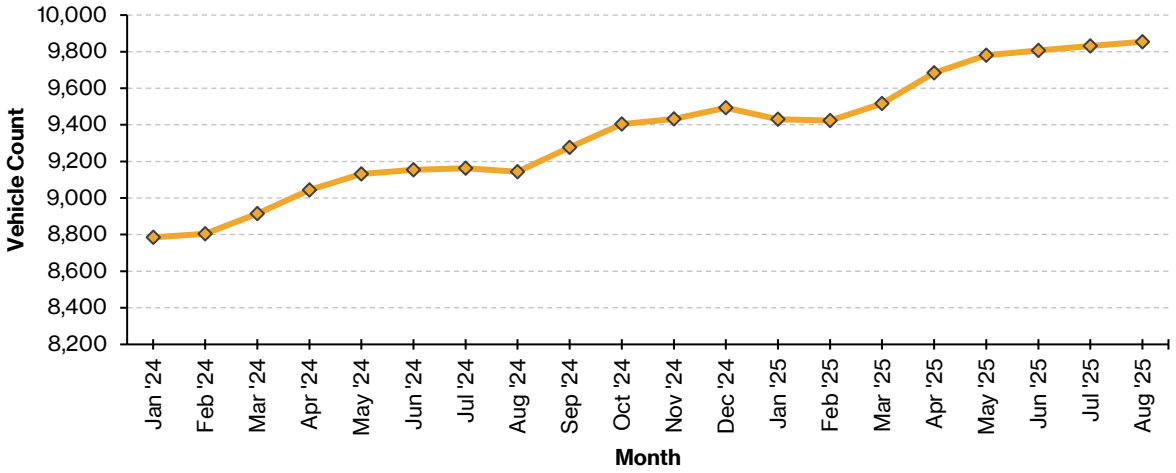
Figure 3-1 and **Figure 3-2** show the number of unique vehicles active in the CRZ and/or excluded roadways each month since January 2024 for the largest two industries (yellow taxis and HVFHVs). Between January and August 2025, the average number of active yellow taxis increased by 7.2 percent

[13] The PTCP is available to TLC-licensed FHV dispatching bases and taxi Technology System Providers. It applies to trips to, from, within, or through the CRZ. Participating companies are responsible for collecting and remitting per-trip charges to the MTA.

compared to the same period in 2024, while the average number of active HVFHVs decreased by 3.4 percent.

These trends largely pre-date the implementation of CRZ tolling. One potential driver of the increase in active yellow taxis is the Flex Fare program—a program that lets e-hail apps dispatch rides to yellow taxis. The program began as a pilot program in 2018 and was made permanent in early 2024. The Flex Fare program continues to grow, making up three percent of yellow taxi trips in 2022 and 2023, 10 percent in 2024, and 23 percent in 2025 for the period from January through August.[14]

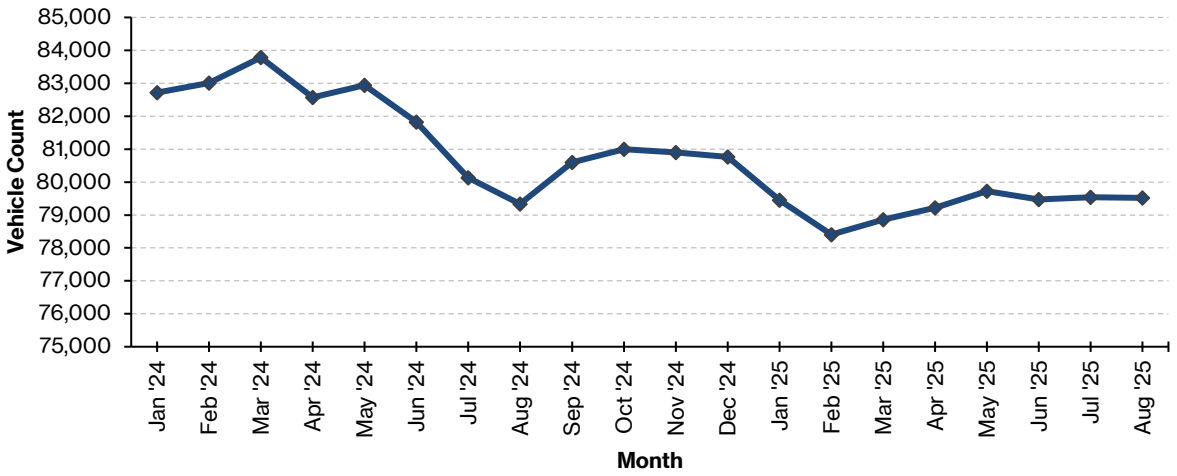
Figure 3-1: Unique Yellow Taxis Active in the CRZ and Excluded Roadways per Month



Source: NYC DOT analysis of Taxi/FHV GPS breadcrumb data.

[14] According to TLC trip records

Figure 3-2: Unique HVFHV Active in the CRZ and Excluded Roadways per Month



Source: NYC DOT analysis of Taxi/FHV GPS breadcrumb data.

Table 3-1: Average Monthly Unique Vehicles Active in CRZ and Excluded Roadways per Year, January through August, 2024 – 2025

Industry	2024	2025	YoY % Change
HVFHV	82,039	79,273	-3.4%
Yellow Taxi	9,017	9,666	7.2%

Source: NYC DOT analysis of Taxi/FHV GPS breadcrumb data.

How has the number of trips to, from, and within the CRZ and on excluded roadways changed?

This section draws on trip record data published by the TLC.[15] These records include details for each passenger trip taken by yellow taxis, HVFHVs, traditional FHVs, and green taxis, including pickup and drop-off locations.

For this analysis, CRZ trips are defined as those meeting one of the following criteria:

- From the CRZ: trips that start within the CRZ and end outside it
- To the CRZ: trips that start outside the CRZ and end within it
- Within the CRZ: trips that both start and end within the CRZ

[15] NYC TLC, TLC Trip Record Data, Accessed September 2025 from https://www.nyc.gov/site/tlc/about/tlc-trip-record-data.page.

Trips with missing pickup or drop-off locations are excluded. Because the TLC's published data include only pickup and drop-off points, trips that only pass through the CRZ cannot be identified and are therefore not included in this analysis.

Average daily CRZ trips

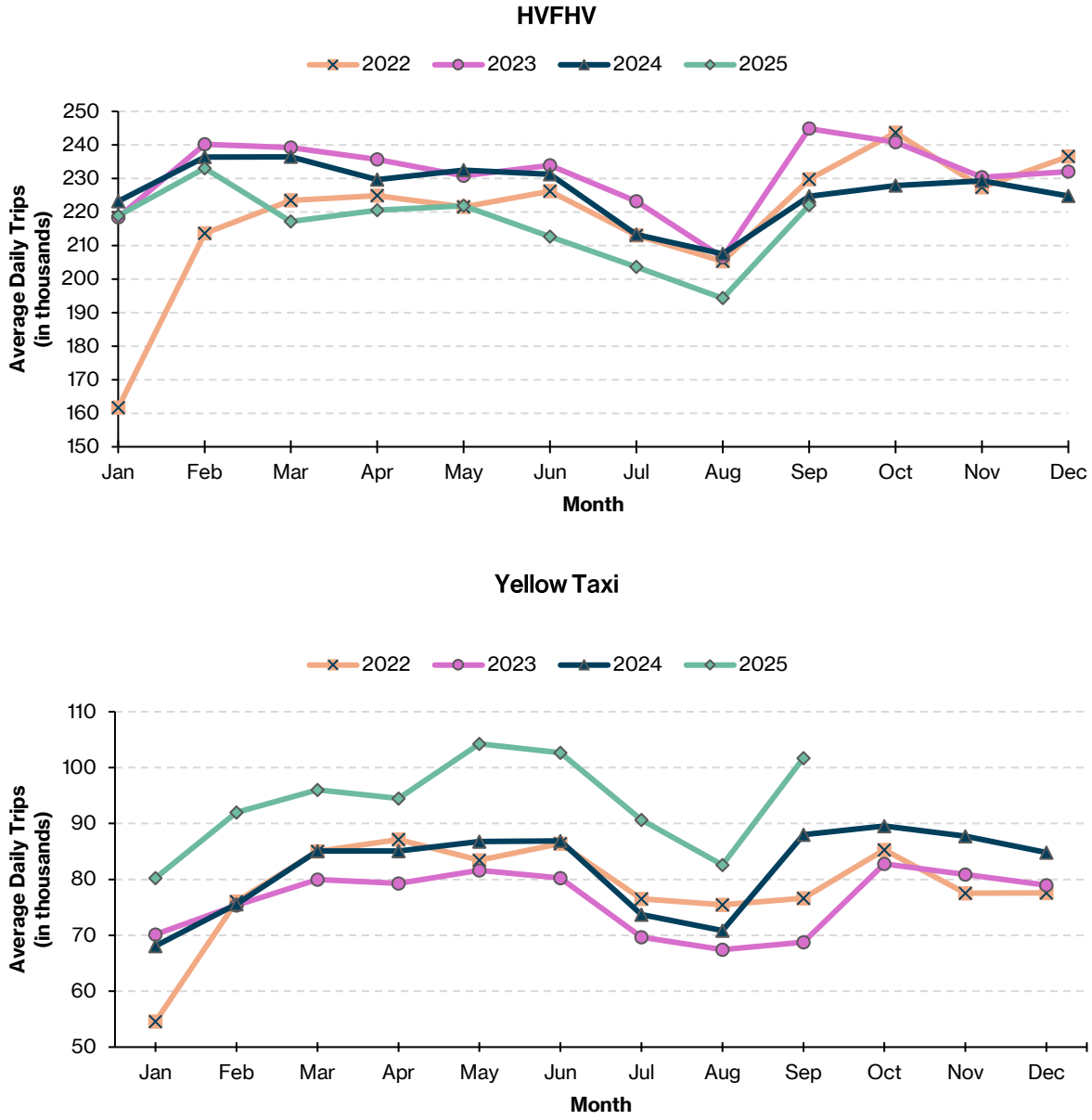
Average daily CRZ trips have either held steady or increased every year since 2022 (see **Table 3-2** and **Figure 3-3**). The number of yellow taxi trips per year has grown steadily each year since 2023. By contrast, the number of trips made by HVFHVs has fallen since trip volumes peaked in 2023. While trip volumes for green taxis and standard FHVs fluctuate year-to-year, they represent a much smaller portion of the total trips. **Table 3-3** displays year-over-year average daily trips per month for green taxis.

Table 3-2: Average Daily CRZ Trips by Industry, January through September, 2022-2025

Industry	Metric	2022	2023	2024	2025
HVFHV	Average Daily Trips	213,097	230,097	225,998	215,809
HVFHV	YoY % Change	-	8.0%	-1.8%	-4.5%
Yellow Taxi	Average Daily Trips	77,877	74,700	79,963	93,794
Yellow Taxi	YoY % Change	-	-4.1%	7.0%	17.3%
Standard FHV	Average Daily Trips	2,354	3,100	1,983	2,674
Standard FHV	YoY % Change	-	31.7%	-36.0%	34.8%
Green Taxi	Average Daily Trips	240	195	166	151
Green Taxi	YoY % Change	-	-18.8%	-14.9%	-9.0%
Total	Average Daily Trips	293,568	308,092	308,110	312,428
Total	YoY % Change	-	4.9%	0.0%	1.4%

Source: TLC, Trip Record Data.

Figure 3-3: Average Daily CRZ Trips by Industry since 2022 (HVFHV and Yellow Taxi)



Note: These data do not include standard FHV and Green Taxi trips; pickup and drop-off locations were missing from the majority of standard FHV trips and green taxi trips provide very limited service in the CRZ.
Source: TLC, Trip Record Data.

Table 3-3: Average Daily CRZ Trips by Month for Green Taxis since 2022

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	186	242	255	275	261	252	227	231	236	215	193	205
2023	185	204	200	194	194	194	183	195	204	181	164	156
2024	140	149	147	164	189	181	165	177	178	161	147	133
2025	120	137	148	160	167	156	152	155	163	-	-	-

Source: TLC, Trip Record Data

Comparing January through September 2025 to the same period in 2024, average daily trips for HVFHVs fell by 10,000 trips, decreasing their proportion of overall trips, while average daily trips for yellow taxis increased by 13,800 trips, increasing their share. **Table 3-4** shows the proportion of CRZ trips by industry by year.

Table 3-4: Proportion of Average Daily CRZ Trips by Industry, January through September, 2022-2025

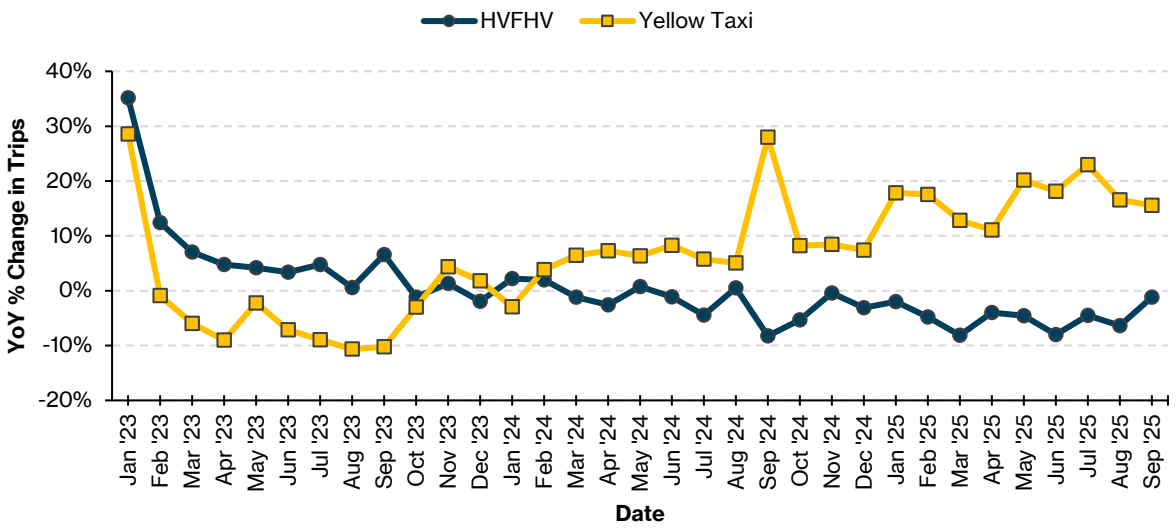
Industry	2022	2023	2024	2025
HVFHV	72.6%	74.7%	73.3%	69.1%
Yellow Taxi	26.5%	24.2%	26.0%	30.0%
Standard FHV	0.8%	1.0%	0.6%	0.8%
Green Taxi	0.1%	0.1%	0.1%	0.0%

Note: Because pickup and drop-off locations are not available for the majority of the trips fulfilled by standard FHVs, CRZ trips fulfilled by standard FHVs may be underrepresented. Standard FHV trips represent six percent of all trips reported in TLC trip records for 2024.

Source: TLC, Trip Record Data.

The growth in yellow taxi trips in the CRZ started in March 2024 before tolling began, as seen in **Figure 3-4**. Up until March 2024, yellow taxi trips in the CRZ and excluded roadways were down year-over-year, but from March onward they show steady year-over-year growth, continuing through the program's launch and into 2025. This increase in yellow taxi trips is also consistent with the increase in active yellow taxi vehicles as reported in **Figure 3-1**.

Figure 3-4: Year-Over-Year Change in Average Daily Trips To, From and Within the CRZ and Excluded Roadways by Month and Industry



Source: TLC, Trip Record Data.

Are taxis and FHVs driving around the CRZ and excluded roadways more or less?

To measure VMT by taxis and FHVs, NYC DOT combines location data for all yellow taxi and HVFHV trips from TLC with data describing trips and assigned segments of the trips within the CRZ and excluded roadways.

The VMT dataset only includes information for yellow taxis and HVFHVs. The analysis presented here includes data from 2024 and 2025; at the time of writing, VMT data were only available for those years.

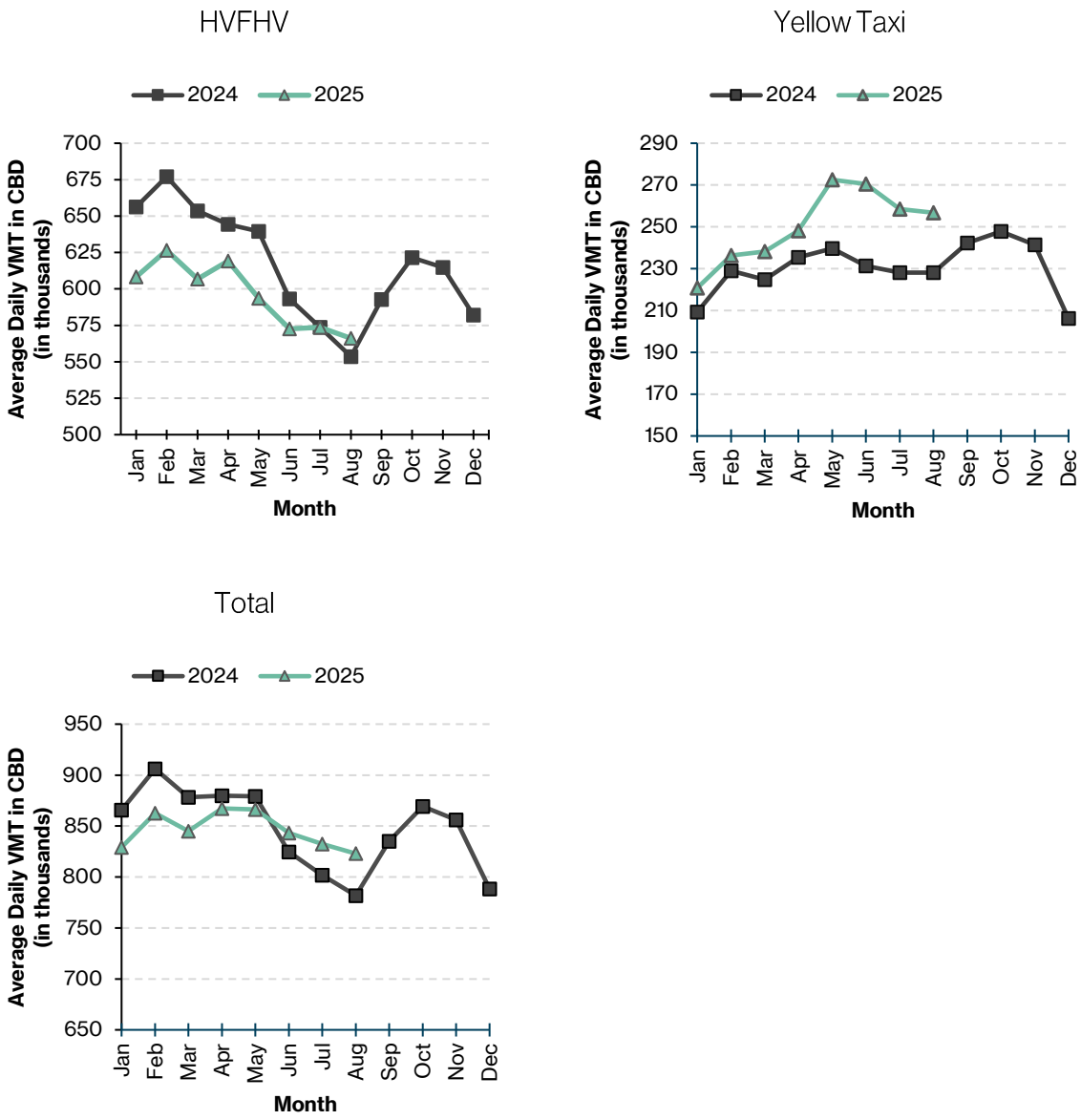
Year-over-year, January through August, HVFHV average daily VMT has fallen while yellow taxi average daily VMT has increased. Since HVFHVs make up a larger share of the total market, this results in a slight overall drop in total VMT. **Table 3-5** and **Figure 3-5** give more detail of changes in VMT within the CRZ and excluded roadways.

Table 3-5: Average Daily VMT within CRZ and Excluded Roadways, January through August, 2024 - 2025

Industry	2024	2025	Percent Change
HVFHV	623,543	595,491	-4.5%
Yellow Taxi	228,185	250,322	9.7%
Total	851,728	845,813	-0.7%

Source: NYC DOT analysis of Taxi/FHV GPS breadcrumb data.

Figure 3-5: Monthly Average Daily VMT within CRZ and Excluded Roadways for HVFHV and Yellow taxis by Year



Source: NYC DOT analysis of Taxi/FHV GPS breadcrumb data.

These changes in VMT for HVFHVs and yellow taxis are consistent with shifts in the number of trips described in **Table 3-1** and the number of active vehicles described in **Figure 3-1** and **Figure 3-2**.

VMT when cruising and on-trip

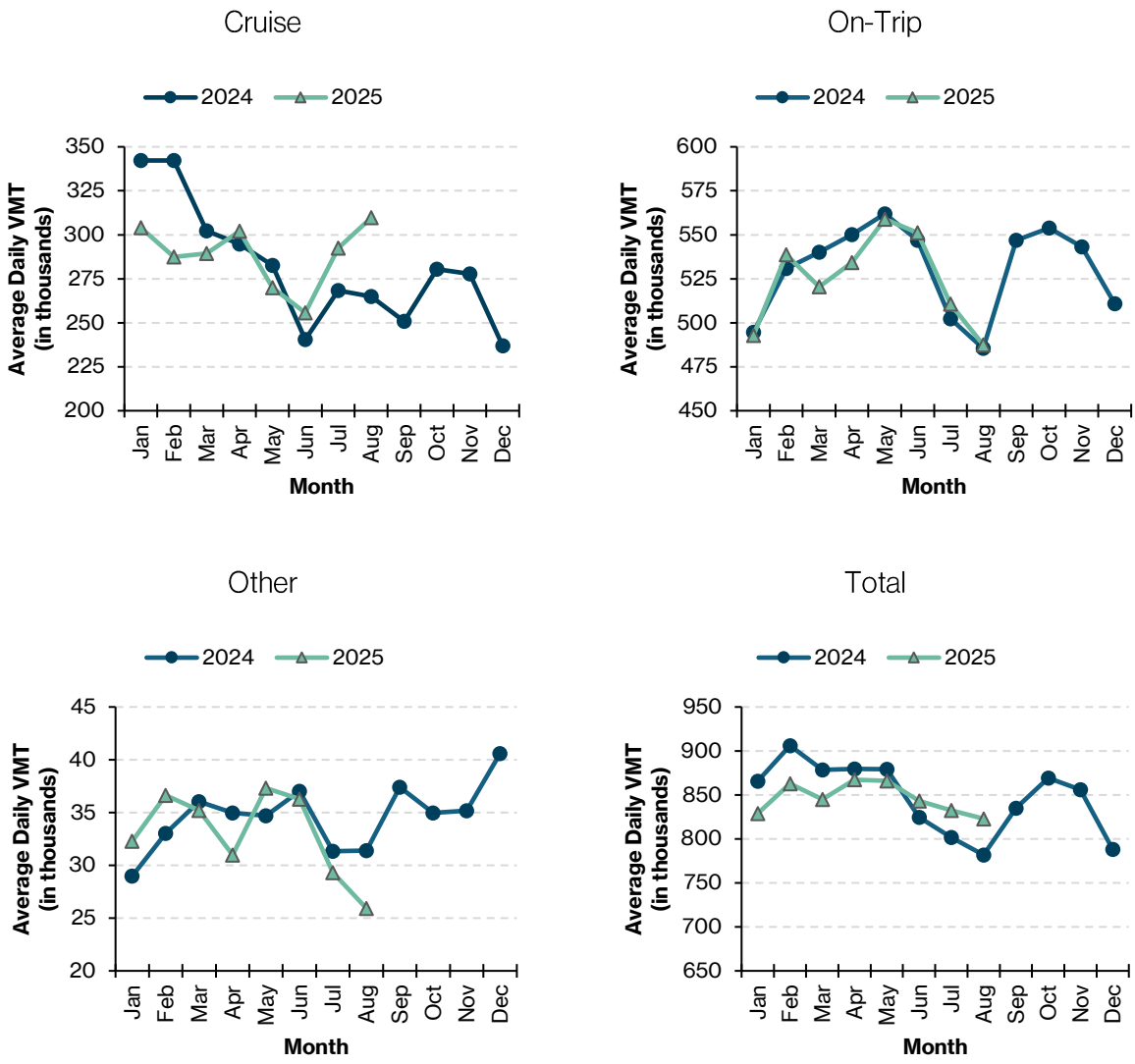
Using the TLC trip data, NYC DOT further categorizes VMT into three categories:

- **On-Trip:** Distance traveled while transporting at least 1 paying passenger.

- **Cruising:** Distance traveled while not on-trip. For HVFHVs, this includes driving while logged into an app, but not on-trip or enroute to a trip reservation.
- **Other:** Distance traveled by HVFHVs between the location where a trip is reserved in an app and the pickup location.

Between 2024 and 2025, yellow taxis and HVFHVs drove approximately 3,000 fewer miles on average per day within the CRZ and excluded roadways while cruising for passengers. **Figure 3-6** and **Table 3-6** illustrate that both on-trip and cruising VMT have decreased slightly year-over-year for the period of January to August. A closer look at monthly trends indicates that from January through May 2025, total VMT was down from the same timeframe in 2024, but starting in June and continuing through August, total VMT in 2025 was up from 2024.

Figure 3-6: Monthly Average Daily VMT within CRZ and Excluded Roadways by Driving Activity



Source: NYC DOT analysis of Taxi/FHV GPS breadcrumb data.

Table 3-6: Average Daily VMT within CRZ and Excluded Roadways, Proportion of Relative Driving Activity VMT and Year-over-Year Change, Yellow Taxi and HVFHVs, January through August, 2024 - 2025

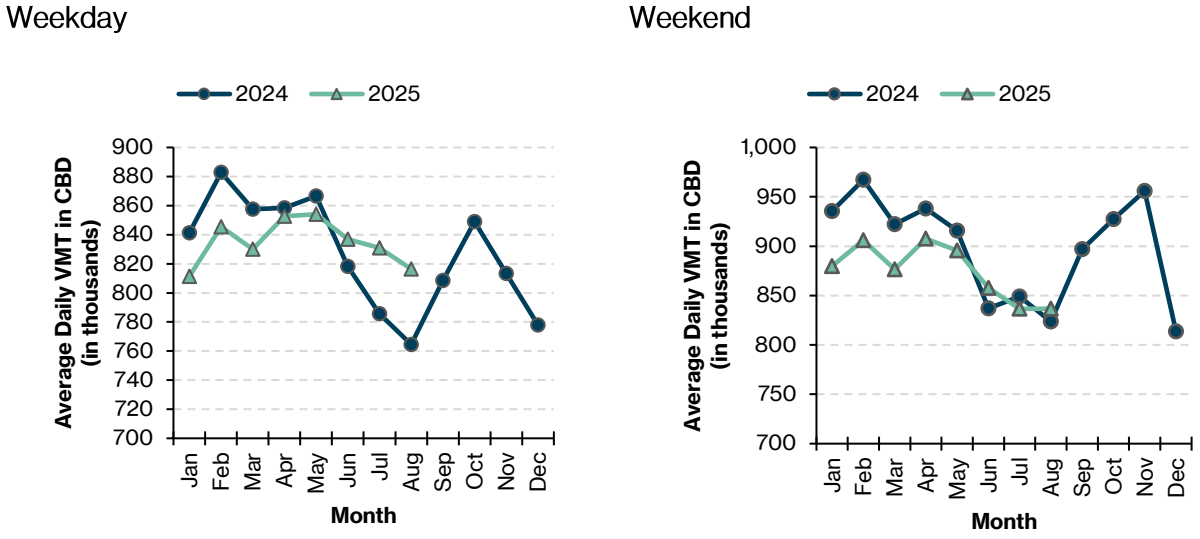
Activity	2024 Average Daily VMT	2024 Share of Total VMT	2025 Average Daily VMT	2025 Share of Total VMT	YoY % Change
On-Trip	526,304	61.8%	523,945	61.9%	-0.4%
Cruise	292,007	34.3%	288,921	34.2%	-1.1%
Other	33,417	3.9%	32,947	3.9%	-1.4%

Source: NYC DOT analysis of Taxi/FHV GPS breadcrumb data.

VMT by weekdays/weekends

A breakdown of VMT by weekday or weekend reveals average daily VMT on weekends has fallen while average daily VMT on weekdays has been fairly flat between 2024 and 2025. This drop in VMT is consistent with the drop seen for overall average VMT for yellow taxis and HVFHVs within the CRZ and on excluded roadways and is shown in **Figure 3-7** and **Table 3-7**.

Figure 3-7: Average Daily VMT within the CRZ and Excluded Roadways, Weekdays and Weekends, Yellow Taxis and HVFHVs



Source: NYC DOT analysis of Taxi/FHV GPS breadcrumb data.

Table 3-7: Average Daily VMT within the CRZ and Excluded Roadways, Weekdays and Weekends, Yellow Taxis and HVFHVs, January through August, 2024 - 2025

Day Type	2024	2025	% Change
Weekday	834,111	834,584	0.1%
Weekend	896,409	873,565	-2.5%

Source: NYC DOT, Analysis of Taxi/FHV GPS breadcrumb data.

Conclusion

Overall, data from the taxi and FHV industries suggest that no substantial change in taxi and FHV activity has appeared with CRZ tolling. This is consistent with the intent of the per-trip charge plan, which was designed to address concerns about the effects of tolling on taxi and FHV drivers' job security. Modest changes observed in VMT and trip volumes appear to reflect broader, long-term trends in the industry, including the gradual rebound of yellow taxi activity.

Transit

Public transit is by far the most popular way to travel to the Congestion Relief Zone (CRZ). On an average business day, more than 70 percent of travelers to the CRZ rely on public transportation, according to the most recent *Hub Bound Travel Data Report*.[16]

In addition to reducing congestion, CRZ tolling is designed to generate revenue for improvements to MTA's bus, subway, and commuter rail networks. Over time, these investments are expected to expand access and reliability, further strengthening transit ridership. The toll may also incentivize shifting of trips from private vehicles to public transportation.

This section reviews changes in public transit ridership since the launch of CRZ tolling. It highlights changes in bus speeds within the CRZ and excluded roadways. The analysis also examines overall ridership trends across systems serving the CRZ, with additional analysis of services provided by the MTA, where more detailed origin-destination data are available.

Data show modest but measurable gains in bus speeds in the CRZ. Initial results also indicate that ridership on MTA services to the CRZ has generally continued its post-pandemic recovery. Regional public transit ridership has also generally continued its growth post-pandemic, with a few exceptions where ridership on systems has declined during the analysis period.

How have bus speeds changed with CRZ tolling?

Average bus speeds are measured using location data from buses that the MTA operates. Each route is divided into segments between major stops (timepoints), and average bus speeds are calculated by dividing the time it takes for buses to travel between pairs of stops if at least one of those stops is located within the CRZ.[17]

Average bus speeds in the CRZ and on the excluded roadways increased from 9.4 mph to 9.6 mph in January through September of 2025 compared to the same period in 2024, a 2.3 percent increase. Outside the CRZ and excluded roadways, bus speeds were essentially flat (up 0.6 percent) over the same period. This increase breaks and reverses the trend from earlier years; between 2022 and 2023 and from 2023 and 2024, average speeds in the CRZ and excluded roadways fell by 2.1 and 1.5 percent, respectively. **Table 4-1** summarizes annual average bus speeds and the change from the previous year by relation to the CRZ.

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[16] NYMTC (March 2025), *Hub Bound Travel Data Report 2023*, p. 16, https://www.nymtc.org/Portals/0/Pdf/Hub%20Bound/2023%20Hub%20Bound/2023%20Hub%20Bound%20Report-%203.18.25.pdf?ver=7S_sDok5O_aw9bEN3A-NjA%3d%3d.

[17] This methodology may include segments that contain portions of the excluded roadways or roadways outside the CRZ as the bus is crossing into the zone.

Table 4-1: Average Bus Speeds (Miles per Hour) per Year and Percent Change, January through September, 2022 through 2025

CRZ Relation	2022 Avg. Speed	2022 % Change	2023 Avg. Speed	2023 % Change	2024 Avg. Speed	2024 % Change	2025 Avg. Speed	2025 % Change
CRZ	9.7	-	9.5	-2.1%	9.4	-1.5%	9.6	2.3%
Non-CRZ	8.2	-	8.2	-0.5%	8.1	-1.2%	8.2	0.6%

Note: Excludes January 1 through 4 for 2025. Includes all service types, including express buses.

Source: MTA, MTA Bus Speeds: Beginning 2015.

How has transit use changed after CRZ tolling?

MTA ridership

The MTA provides the bulk of trips (82 percent) to the CRZ across bus, subway, and commuter rail service.[18] Of these modes, subway has the highest ridership at nearly 3.5 million average daily riders, followed by bus, which has over 1.2 million average daily riders based on ridership in 2025 from January through August.[19] Increases in transit use entering the CRZ can be seen in NYC subway trip origins and destinations and in ridership on MTA bus routes that serve the CRZ.

Bus ridership on MTA routes serving the CRZ

Ridership on MTA bus routes serving the CRZ has increased year over year from 2022 to 2025 when comparing the period from January 5 to September 30.[20] From 2024 to 2025, average daily ridership during these months increased by eight percent.

Figure 4-1 and **Table 4-2** describe recent growth in more detail. Routes are divided into two service-type groups: 1) Express and 2) Select Bus Service (SBS) and Local/Limited. Routes are also divided by whether they serve at least one stop in the CRZ and those that have no stops in the CRZ. Ridership on Express routes, all of which serve the CRZ, has increased each year since 2022, with greater gains in 2022-2023 representing post-pandemic recovery in ridership. In 2025, non-Express routes that serve the CRZ saw larger ridership gains than routes that do not serve the CRZ.

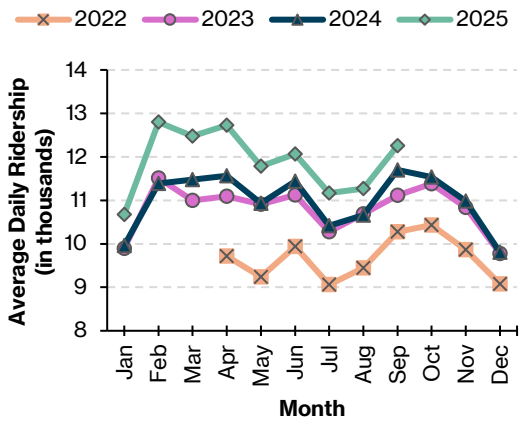
[18] Measured as public transit trips entering the CRZ and excluded roadways on a typical fall business day in 2023, the latest available; NYMTC (March 2025), Hub Bound Travel Data Report 2023, https://www.nymtc.org/en-us/Data-and-Modeling/Transportation-Data-and-Statistics/Publications/Hub-Bound-Travel

[19] MTA, MTA Daily Ridership and Traffic: Beginning 2020, accessed November 2025 from https://data.ny.gov/d/sayj-mze2.

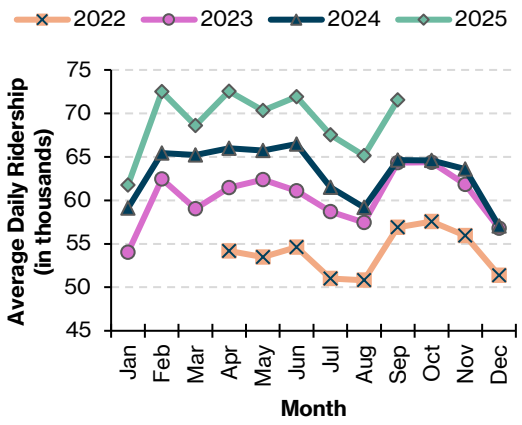
[20] MTA bus ridership is derived from OMNY and MetroCard taps and swipes in addition to an estimate of cash fare payments. If a passenger transfers from one bus to another using OMNY taps, this passenger's trips would be counted twice for each tap on the bus routes.

Figure 4-1: Monthly Average Daily Ridership on MTA-Operated Bus Service, 2022 through 2025

Express-CRZ

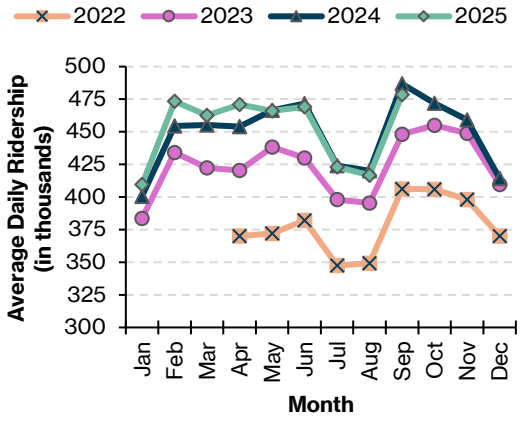


SBS, Local/Limited-CRZ



All express buses serve the CRZ

SBS, Local/Limited-Non-CRZ



Note: Data for January 1 through 4 excluded for all years.
Source: MTA, MTA Daily Ridership and Traffic: Beginning 2020.

Table 4-2: Year-over-Year Change in Average Daily Ridership on MTA-Operated Bus Service, January through September, 2022 through 2025

Route Type	Zone	2022-2023	2023-2024	2024-2025
Express	CRZ	13.1%	2.6%	7.8%
SBS, Local/Limited	CRZ	12.8%	6.0%	8.4%
SBS, Local/Limited	Non-CRZ	13.1%	7.6%	0.0%

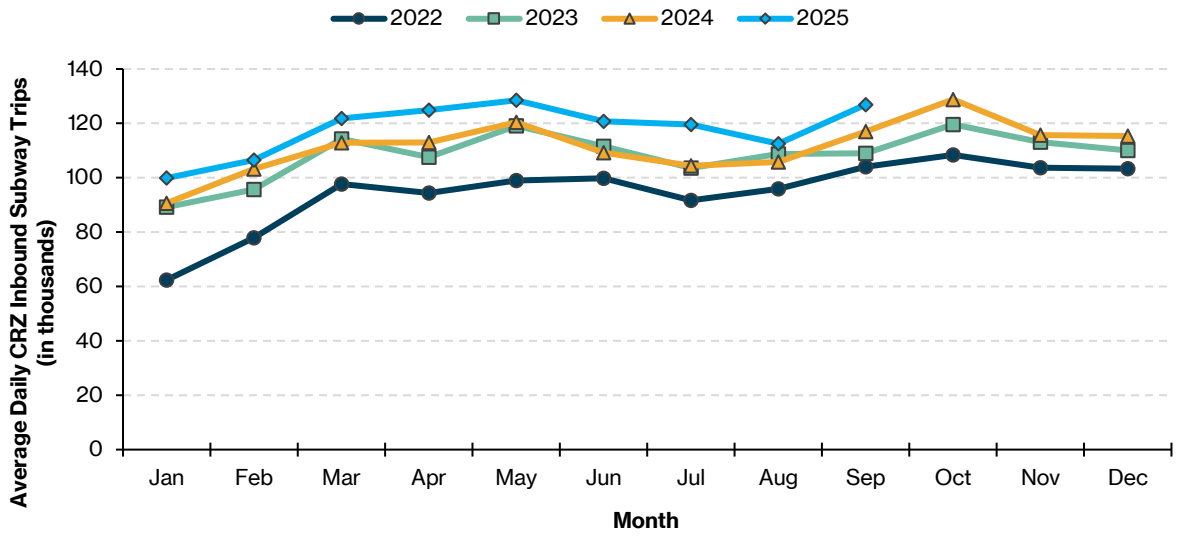
Note: Data for January 1 through 4 excluded for all years.

Source: MTA, MTA Daily Ridership and Traffic: Beginning 2020.

New York City Transit Subway trips into the CRZ

The MTA produces NYCT subway ridership data with trip origins and destinations; these data allow for a detailed look at MTA subway ridership to, from, and within the CRZ.[21] These data show average daily subway trips into the CRZ between January 5, 2025 and September 30, 2025 were nine percent higher than the same period in 2024.[22] Looking back to 2022, the increase between 2024 and 2025 continues a trend since the pandemic of year-over-year increases in subway trips into the CRZ as detailed in **Figure 4-2**.[23]

Figure 4-2: Average Daily MTA New York City Transit (NYCT) Subway Trips into the CRZ by Month, 2022 through 2025



Note: Data for January 1 through 4 excluded for all years.
Sources: MTA, MTA Subway Origin-Destination Ridership Estimate.

[21] Taps and swipes data are processed to derive assumed destinations of a trip when enough information is available. See the following website for a full explanation of how trip destinations are inferred: https://data.ny.gov/api/views/jsu2-fbtj/files/55495630-d2ca-4802-b400-db7199651b6b?download=true&filename=MTA_SubwayOriginDestinationRidershipEstimate2024_Overview.pdf

[22] NYCT subway trips are measured in terms of assumed passenger trips from origin-destination data inferred from taps and swipes from MetroCard and OMNY. Passenger trips are defined as unique one-way movement from one location to another, even when transferring from one subway route to another.

[23] MTA, MTA Subway Origin-Destination Ridership Estimates for 2022-2025, accessed October 2025 from https://data.ny.gov/d/nqnz-e9z9, https://data.ny.gov/d/uhf3-t34z, https://data.ny.gov/d/jsu2-fbtj, and https://data.ny.gov/d/y2qv-fytt.

Table 4-3: Year-Over-Year Change in NYCT Subway Trips into the CRZ, January through September, 2022 through 2025

Year	% Increase in Average Daily Trips
2022-2023	17%
2023-2024	2%
2024-2025	9%

Note: Data for January 1 through 4 excluded for all years.
Sources: MTA, MTA Subway Origin-Destination Ridership Estimate.

Systemwide ridership changes

Table 4-4 summarizes systemwide average daily ridership on MTA operated services between 2022 and 2025.[24] Between January and September 2025, all services saw increases in ridership compared to the same period of 2024. Access-A-Ride saw the largest gain, with an 18.7 percent increase in average daily ridership, followed by buses with a 13.4 percent increase. Long Island Rail Road (LIRR), Metro-North Railroad (MNR), and the subway saw between seven and 10 percent increases.

Regional transit ridership

In addition to the MTA, five other public transit operators serve the CRZ:[25]

1. New Jersey Transit (NJ Transit)[26] operates bus, demand-responsive transit, and commuter rail service.
2. The Port Authority of New York and New Jersey (PANYNJ) operates Port Authority Trans-Hudson (PATH) subway service.
3. The New York City Department of Transportation (NYC DOT) operates the Staten Island Ferry.
4. The New York City Economic Development Corporation (NYCEDC) operates NYC Ferry service.
5. The Roosevelt Island Operating Corporation (RIOC) operates the Roosevelt Island Tram.

Table 4-5 summarizes average daily ridership for all operators between 2022 and 2025. Between January and August 2025, MTA ridership grew by 10 percent, PANYNJ's PATH ridership grew by 7.8 percent, and NYC DOT's Staten Island Ferry ridership grew 1.3 percent compared to the same period of 2024. Meanwhile, average daily ridership for NJ Transit fell by 1.7 percent,[27] NYCEDC ferry ridership increased by two percent,[28] and RIOC average daily ridership is down 15.2 percent between January and August 2025 compared to the same period of 2024.

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[24] Commuter rail, LIRR and MNR ridership is estimated by a model looking at all forms of ticket sales within the system. Access-A-Ride ridership is generated from scheduled trips and represents the demand rather than trips completed.
[25] MTA, NTD for NJ Transit, PANYNJ, NYC DOT, NYCEDC, MTA Regional Transit: Ridership: Beginning 2021, data.ny.gov, https://data.ny.gov/d/sv2g-g4mz, Accessed September 2025. There are also private transit services such as Hampton Jitney, TripperBus, and others, but ridership data are not publicly available or difficult to obtain
[26] Data for NJ Transit is from the U.S. Department of Transportation, Federal Transit Administration (FTA) National Transit Database (NTD), because NJ Transit does not independently publish ridership data. NTD provides ridership for each transit operator's entire service area, so these figures include ridership on service outside the New York City region.
[27] In July 2024, NJ Transit increased fares by 15 percent. In May 2025, NJ TRANSIT experienced a 3-day strike.
[28] In September 2024, NYCEDC increased fares by 55 percent.

Table 4-4: Average Daily Ridership and Percent Change on MTA-Operated Service, January through September, 2022 through 2025

Mode	2022 Daily Ridership	2022 % Change	2023 Daily Ridership	2023 % Change	2024 Daily Ridership	2024 % Change	2025 Daily Ridership	2025 % Change
Access-A-Ride	24,479	-	29,769	21.6%	35,653	19.8%	42,307	18.7%
Bus	1,161,852	-	1,192,878	2.7%	1,091,897	-8.5%	1,238,669	13.4%
Long Island Rail Road	139,406	-	173,993	24.8%	202,418	16.3%	222,486	9.9%
Metro-North Railroad	127,301	-	160,139	25.8%	176,831	10.4%	189,763	7.3%
Subway	2,692,621	-	3,120,286	15.9%	3,192,829	2.3%	3,477,379	8.9%

Note: For buses, ridership is derived from OMNY and MetroCard taps and swipes in addition to an estimate of cash fare payments. If a passenger transfers from one bus to another using OMNY taps, this passenger's trips would be counted twice for each tap on the bus routes. For commuter rail, LIRR and MNR ridership is estimated by a model looking at all forms of ticket sales within the system. Subway ridership numbers are derived from OMNY and MetroCard taps and swipes in the system and Access-A-Ride ridership is generated from scheduled trips and represents the demand rather than trips completed.
Source: MTA, MTA Daily Ridership and Traffic: Beginning 2020.

Table 4-5: Average Systemwide Daily Ridership and Percent Change for All Transit Operators Providing Service to the CRZ, January through August, 2022 through 2025

Transit Operator	2022 Daily Ridership	2022 % Change	2023 Daily Ridership	2023 % Change	2024 Daily Ridership	2024 % Change	2025 Daily Ridership	2025 % Change
MTA	4,084,027	-	4,671,312	14.4%	4,648,843	-0.5%	5,112,676	10.0%
New Jersey Transit Corporation	417,248	-	509,260	22.1%	551,585	8.3%	542,193	-1.7%
New York City Department of Transportation	36,199	-	42,557	17.6%	44,929	5.6%	45,513	1.3%
NYC Economic Development Corporation	17,282	-	19,714	14.1%	20,825	5.6%	21,239	2.0%
Port Authority of New York/New Jersey	110,636	-	134,793	21.8%	150,931	12.0%	162,694	7.8%
Roosevelt Island Operating Corporation	5,487	-	7,084	29.1%	9,354	32.0%	7,936	-15.2%

Note: Data include January 1 through 4 since most operators do not publish daily data. Ridership is unlinked passenger trips.
Sources: MTA, MTA Regional Transit Ridership: Beginning 2021; NTD for NJ Transit; PANYNJ; NYC DOT; NYCEDC.

Conclusion

Public transit continues to serve as the backbone of travel to and within the CRZ. Since the start of tolling, ridership across most regional systems has continued to grow, and bus speeds within the CRZ and excluded roadways have shown modest but measurable improvements. While shifts from private vehicles to transit may have contributed to the continued growth in ridership, they represent just one of several factors driving growth during the post-pandemic recovery.

Air Quality and Emissions

Analysis of air quality as related to CRZ tolling focuses on two areas: assessing improvements within the CRZ from reduced vehicle traffic, and monitoring for any added burdens in communities outside the CRZ.

This monitoring draws on multiple data sources: regulatory regional air quality data from the U.S. Environmental Protection Agency's (EPA) Air Quality System (AQS), local pollutant data from the New York City Community Air Survey (NYCCAS), and additional PM2.5 monitors at key locations funded by CRZ tolling. In addition, traffic counts are conducted along with air quality monitoring to analyze whether changes in air quality could be attributed to changes in vehicle traffic. The NYC Health Department provided extensive technical expertise in analyzing and interpreting these data.

While it is too early to reach definitive conclusions, air pollution patterns across the region in the initial months of tolling have been consistent with recent historical trends. At the same time, modeled greenhouse gas emissions within the CRZ have declined in line with reductions in VMT. TBTA and the NYC Health Department will publish a report with conclusions about the program's effects on air quality, once a full year of post-tolling data are available and can be analyzed.

Estimated greenhouse gas (GHG) emissions from vehicular traffic in the CRZ draws on data from StreetLight Data, Inc.

Which pollutants are being monitored?

Air quality monitoring and analysis for CRZ tolling includes five pollutants associated with vehicular traffic: PM2.5, which comes mainly from brake, tire, and road dust, as well as diesel exhaust; nitrogen dioxide (NO2), nitric oxide (NO) and ozone (O3), which are formed from vehicle exhaust; and black carbon (BC), which comes from diesel exhaust. Of all the pollutants monitored, NO2 is the best indicator of traffic-related air pollution due to its stability in the atmosphere and reliability of measurement.

Although the transportation sector is a major source for these pollutants, they also come from a variety of other local sources, including building heating, restaurant cooking, industrial activities, and construction, among others. Most pollutants also have strong seasonal patterns, either because of atmospheric chemistry and weather or because of activity patterns. For example, ozone levels are highest in the summer because of hotter temperatures, which drive reactions that form ozone in the atmosphere; NO2 and PM2.5 levels are higher in the winter due to fossil fuel combustion for indoor heating. In addition, pollution levels have been decreasing over the past decades and are expected to continue to do so to the extent regulations result in reduction of emissions from vehicles, power plants, and buildings.

How is air quality being measured?

This analysis relies on the EPA AQS for NO2, O3, and PM2.5 data from monitors in Nassau, Suffolk, Westchester, Rockland, and Putnam counties in New York; Bergen and Hudson counties in New Jersey;

and Fairfield and New Haven counties in Connecticut. AQS is a database of air pollution measurements throughout the nation that is freely available to the public. State, local, and tribal air pollution control agencies report ambient levels of certain pollutants to the EPA in accordance with the Clean Air Act.[29]

The NYCCAS monitoring network provides additional PM2.5, NO2, NO, O3, and BC data and analysis for New York City. NYCCAS is a monitoring network of research-grade integrated sampling units maintained by the NYC Health Department and the Barry Commoner Center for Health and the Environment at Queens College, a part of the City University of New York (CUNY), to study how pollutants from traffic, buildings, and other sources impact air quality in different neighborhoods. The NYC Health Department has reported on neighborhood air quality and the factors that drive it since 2009.[30]

The core of NYCCAS is a monitoring network of integrated sampling units that are deployed for two weeks once per season (December through February for winter, March through May for spring, June through August for summer, and September through November for fall) at 84 sites across New York City (indicated as black plus signs in **Figure 5-1**). Capturing snapshots of pollution levels seasonally provides high quality data for all the pollutants of interest but does not describe hourly or daily pollution patterns.

As committed to by the Project Sponsors in the Final EA, FONSI, and Reevaluation 1, funds from CRZ tolling have been allocated to the NYC Health Department to deploy and maintain additional real-time monitoring equipment and increase the frequency of core network sampling, from once per season to monthly, at seven monitoring locations to monitor the effects, if any, of CRZ tolling on air quality along highways in environmental justice (EJ)-designated communities. TBTA identified six locations for monitors in EJ-designated communities near highways where modeling for the Final EA and Reevaluation 1 predicted potential increases in traffic with the start of tolling:[31]

1. The Trans-Manhattan Expressway between the George Washington Bridge and the Alexander Hamilton Bridge (Hamilton Bridge) in the Washington Heights neighborhood (Washington Heights – Inwood community).
2. The Cross-Bronx Expressway (Cross Bronx Expwy) in the Highbridge-Tremont neighborhood (High Bridge – Morrisania and Crotona Tremont communities).
3. The FDR between E. 10 St. and the Manhattan Bridge (FDR) on the Lower East Side (Union Square-Lower East Side community).
4. The Robert F. Kennedy Bridge and connecting links in the Bronx, Manhattan, and Queens –Hunts Point (Hunts Point-Mott Haven community).
5. The Brooklyn-Queens Expressway between Metropolitan Ave. and DUMBO (BQE) in the South Williamsburg neighborhood (Greenpoint community).

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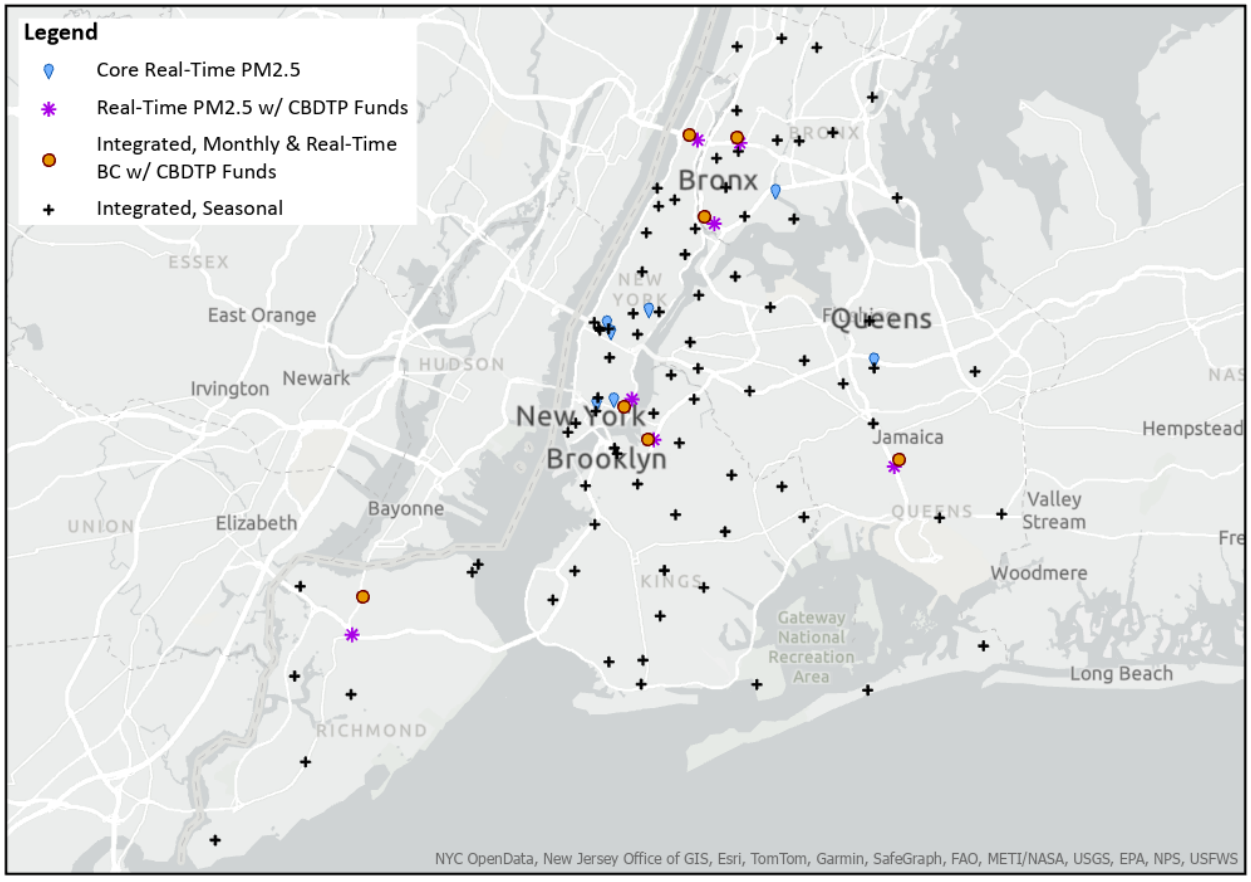
[29] For more information about AQS, refer to https://www.epa.gov/aqs.
[30] The NYCCAS Annual Reports are available at nyc.gov/health/nyccasreport.
[31] The place name in parenthesis with each monitoring location is the corresponding United Hospital Fund neighborhood, which were used to designate communities in the Final EA's EJ analysis of traffic diversions. For more information, see FHWA (June 2023), CBD Tolling Program Final EA Appendix 17D, "Technical Memorandum –Considerations for Environmental Justice Communities with Existing Pollution or Health Burdens,", footnote 68, on p. 17D-29 and footnote 101, on p. 17D-50 at https://www.mta.info/document/111056.

6. The Staten Island Expressway and connections to the Bayonne Bridge (SI Expwy) in the Port Richmond and Bulls Head neighborhoods (Port Richmond and Willowbrook communities).

The seventh monitoring location is near the Van Wyck Expressway, where traffic is not expected to change due to CRZ tolling, and was chosen as a control site. **Figure 5-2** depicts these locations.

Each of the seven locations has a core integrated NYCCAS monitoring site within the adjacent EJ-designated community (indicated by an orange circle in **Figures 5-1 and 5-2**), where pollutants were previously sampled once per season and are now monitored monthly. The addition of real-time PM2.5 monitors at locations closer to the highways (indicated by a pink asterisk in **Figures 5-1 and 5-2**) allows for correlation analyses of changes in traffic and PM2.5 patterns. Real-time BC monitors placed alongside the integrated monitors (also indicated by the orange circles in **Figures 5-1 and 5-2**) capture any changes that may be related to diesel truck traffic in the neighborhoods surrounding the road segments.

Figure 5-1: Map of NYCCAS Integrated Multi-Pollutant Monitors and Real-Time PM2.5 Sites



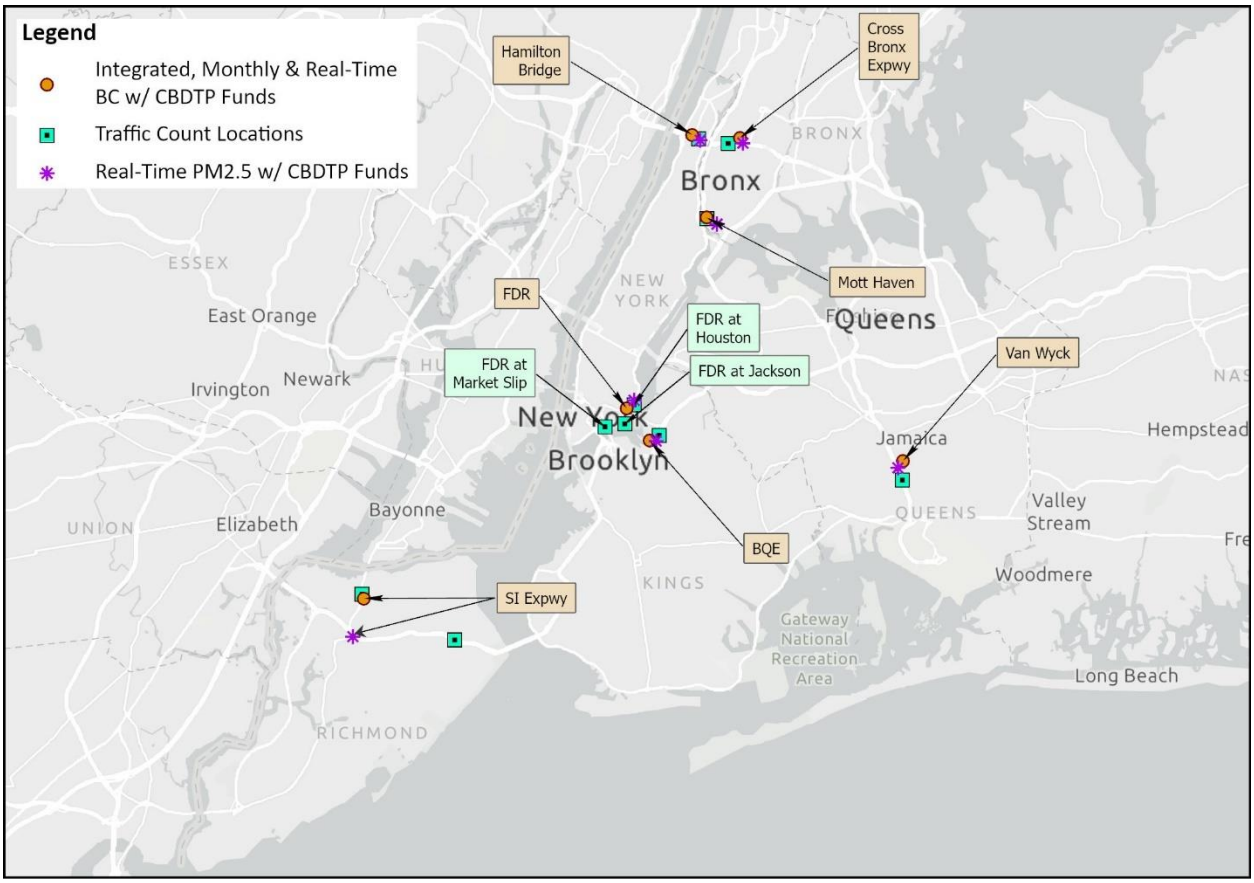
Sources: NYC Health Department, TBTA.

Since traffic is not the only source of the five monitored pollutants, unless there is evidence of a change in traffic related to tolling near the monitoring sites, then any changes in pollution levels detected by the NYCCAS network would not be associated with tolling. Traffic counts conducted by NYSDOT and NYC DOT on highways near the NYCCAS sites allow for traffic reporting and analysis in parallel to pollutant

reporting and analysis. **Figure 5-2**, below, describes the locations of these traffic count sites and the seven NYCCAS monitoring sites listed above to which each traffic count site is paired.

At most sites, these vehicle counts usually consist of periodic short counts on weekdays, when equipment is placed on the highways to count vehicles for approximately 50 hours. A pre-existing NYSDOT traffic count site along the Cross Bronx Expressway collects data at all times. Each NYCCAS site is paired with one traffic count site, though the NYCCAS site on the FDR Drive is paired with three count sites. TBTA, NYSDOT, and NYC DOT included two additional traffic count sites along the FDR Drive to bolster air quality analysis in the Lower East Side and Lower Manhattan communities in response to community concerns.

Figure 5-2: NYCCAS Monitoring Sites in EJ-Designated Communities and Accompanying Traffic Count Sites



Sources: NYC Health Department, NYSDOT, TBTA.

What are the early findings for air quality?

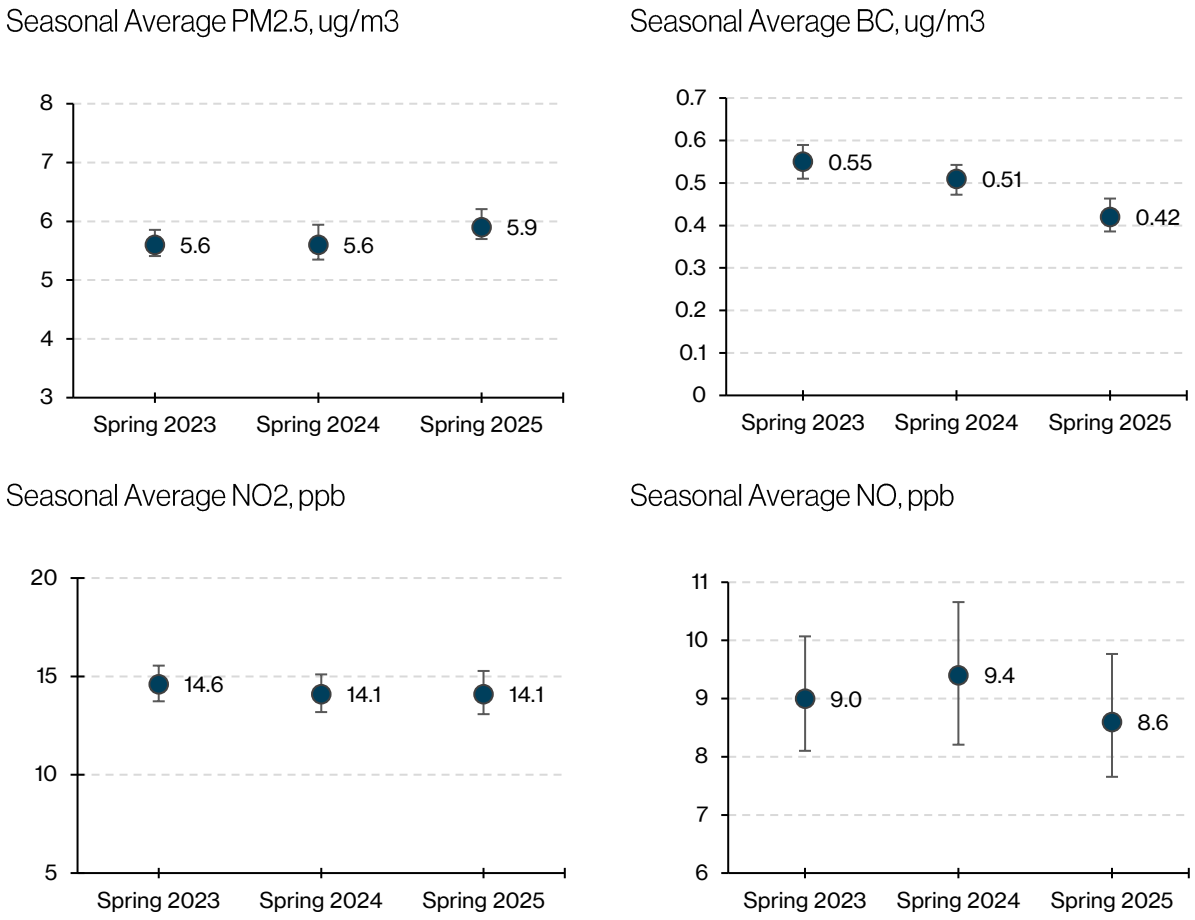
Air pollution in New York City comes from a variety of sources and has strong seasonal patterns, so it is essential to account for annual and seasonal trends in data when assessing the impact of CRZ tolling on air quality. The future assessment of the impact of CRZ tolling on air quality will incorporate data from 12 months prior to the beginning of operations on January 5, 2025, and 12 months after implementation.

At this time, early results and conclusions from statistical analyses, which separate seasonal and long-term trends from any impact of the tolling program, are available from the integrated monitoring sites from the spring seasons before tolling (spring 2023 and spring 2024) and after tolling started (spring 2025).[32] Ozone data are only collected during the summer season when hot temperatures cause levels to increase; so data are not available for analysis at this time and will be included in a later report. This chapter presents statistical analyses of spring season changes in average NO2, NO, BC, and PM2.5 levels as measured using the integrated sampling units inside the CRZ, among the EJ-designated neighborhood sites as a group, and throughout the rest of the city following the start of tolling.[33] Trends in pollution levels as measured with the integrated sampling units at each of the EJ-designated neighborhood sites and additional months of data from the PM2.5 real-time monitoring network are also shown; however, there are not yet enough months of data to conduct statistical analyses of changes at each individual EJ-designated neighborhood monitoring site.

Throughout the city, outside of the CRZ, the levels of PM2.5, NO2, BC and NO in spring 2025, after tolling began, were effectively the same compared to the prior two spring seasons (**Figure 5-3**).[34] Spring of 2023 is included to show baseline levels. With more seasons of air pollution data, the potential influence of CRZ tolling on air quality in NYC will be able to be assessed in more depth.

[32] These statistical analyses are known as "difference-in-difference" analyses. A full description of the methodology used in this analysis can be found in the CBD Tolling Program Evaluation Methods Overview, available at https://www.nyc.gov/assets/doh/downloads/pdf/environmental/cbdtp-aq-monitoring-methods.pdf.
[33] Average values, as opposed to maximum values, better represent on-going exposure to pollutants.
[34] The NYC Health Department and the Barry Commoner Center for Health and the Environment at Queens College (CUNY), NYCCAS.

Figure 5-3. PM2.5, NO2, BC, and NO Spring Average and 95% Confidence Intervals from Integrated Sampling Units, Citywide Average Excluding the CRZ.

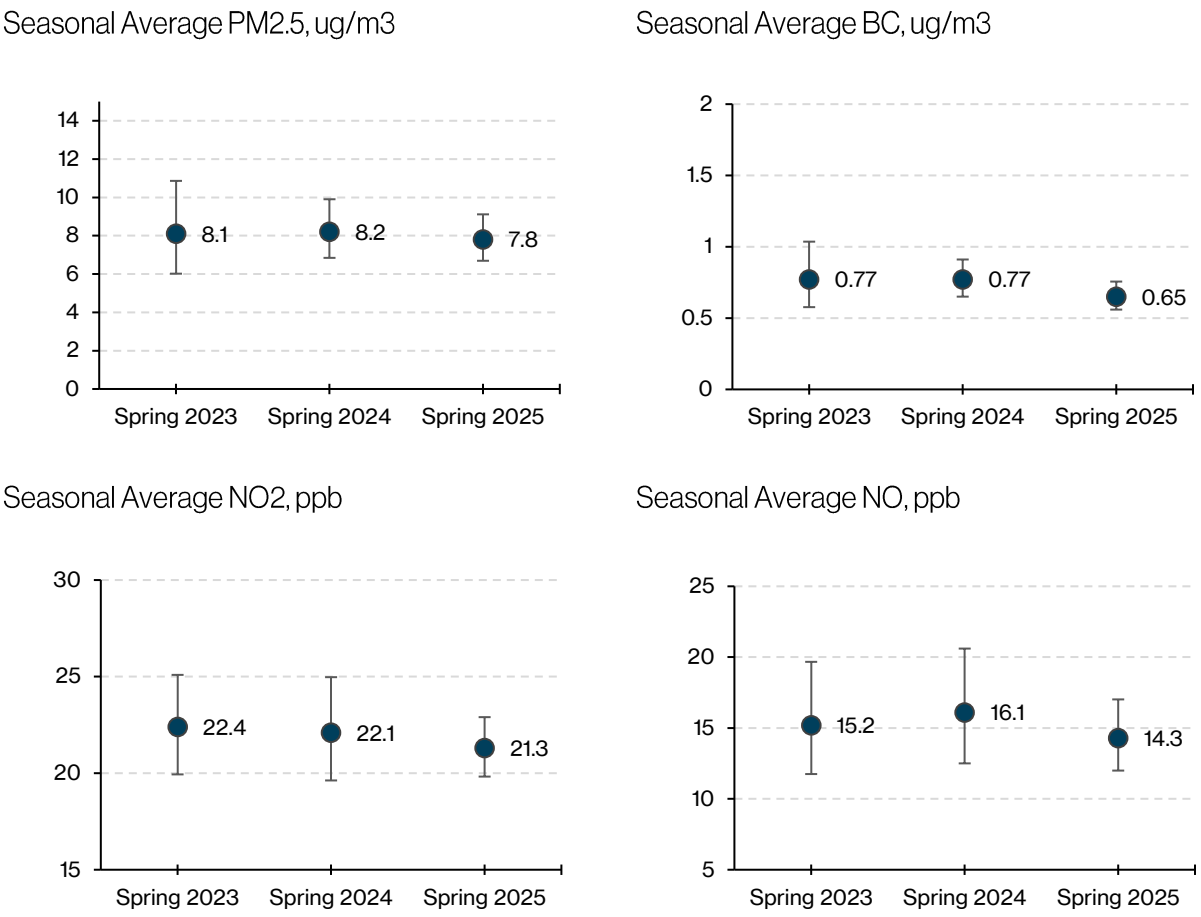


Notes: "ug/m3" is micrograms per cubic meter; "ppb" is parts per billion. Confidence intervals define how certain it is that the average is correct. Measurements taken during the wildfire smoke event of 2023 were excluded.

Sources: NYC Health Department and Queens College (CUNY), NYCCAS.

Looking at sites within the zone (**Figure 5-4**), levels of all four pollutants were similar or slightly lower in the spring of 2025 compared to recent prior spring seasons, though the differences were not statistically significant. Spring of 2023 is included to show baseline levels. These same comparisons for summer, fall, and winter data will be released in a subsequent air-quality report.

Figure 5-4: PM2.5, NO2, BC, and NO Spring Average and 95% Confidence Intervals from Integrated Sampling Units, Inside the CRZ

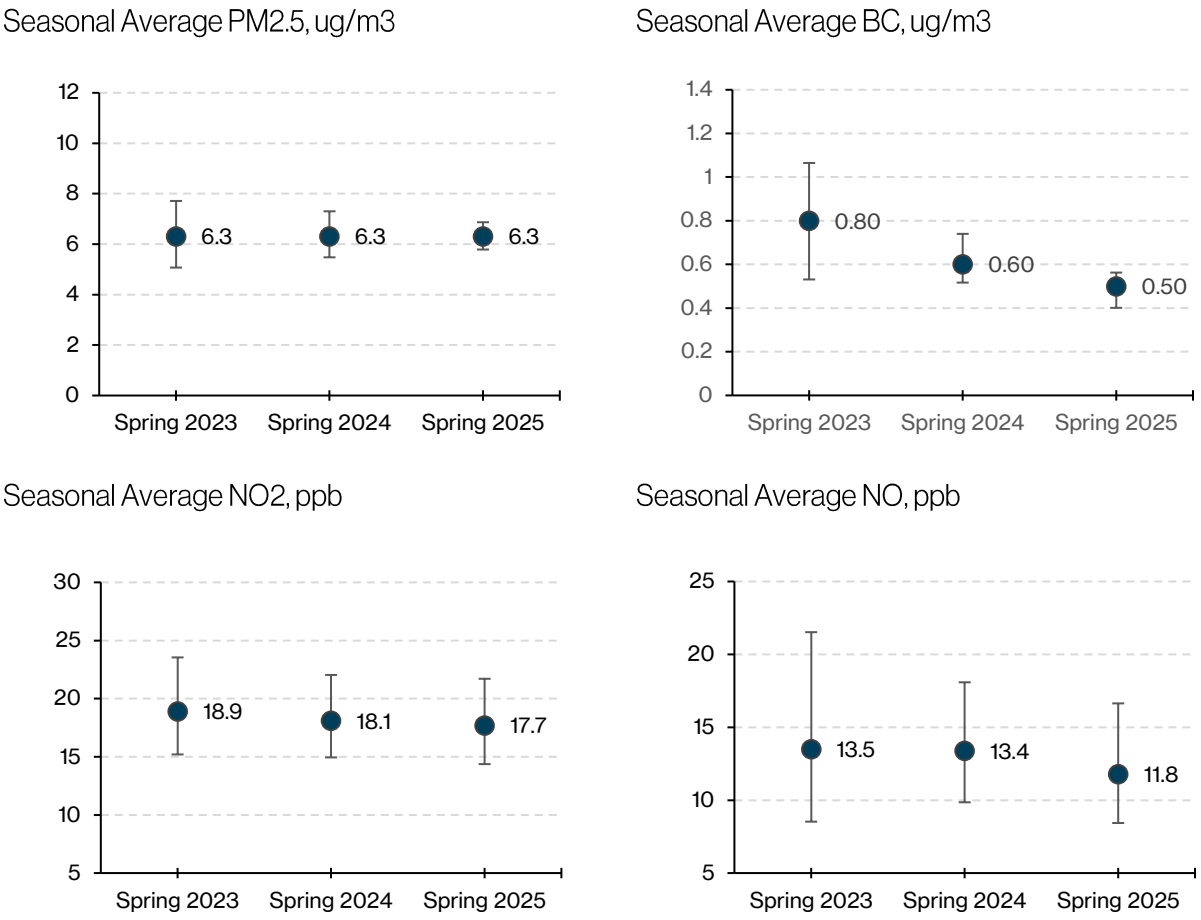


Notes: "ug/m3" is micrograms per cubic meter; "ppb" is parts per billion. Measurements taken during wildfire smoke event of 2023 were excluded.

Sources: NYC Health Department and Queens College (CUNY), NYCCAS.

When the six EJ-designated neighborhood sites are examined as a group, the levels of PM2.5, NO2, BC, and NO in Spring 2025 are the same or slightly lower than the levels in the previous two spring seasons, though none of the differences were statistically significant (see **Figure 5-5**).

Figure 5-5. PM2.5, NO2, BC, and NO Spring Average and 95% Confidence Intervals from Integrated Sampling Units, All EJ-Designated Neighborhood Sites Grouped



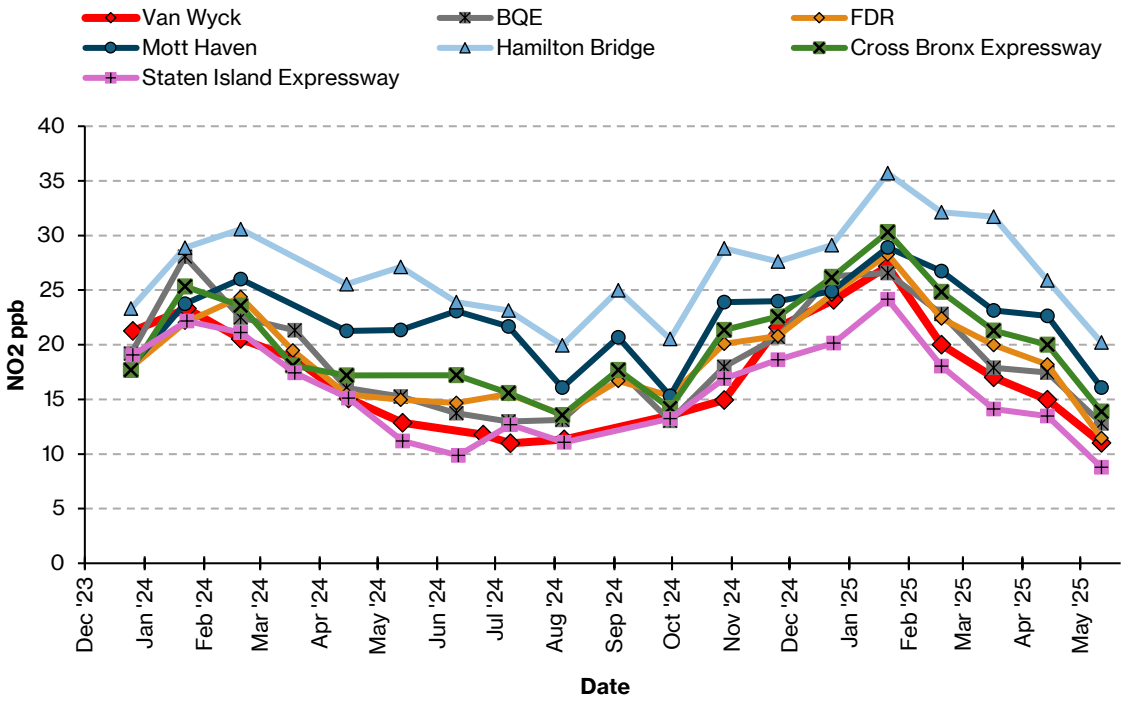
Notes: "ug/m3" is micrograms per cubic meter; "ppb" is parts per billion. Measurements taken during wildfire smoke event of 2023 were excluded.

Sources: NYC Health Department and Queens College (CUNY), NYCCAS.

Though there are not enough months of data to statistically evaluate changes in pollution levels at each of the EJ-designated neighborhood sites individually, patterns at each of the sites can be compared to patterns at the Van Wyck control site.

The patterns for NO2 (the best indicator for vehicle exhaust) through May 2025 at the EJ-designated neighborhood sites (**Figure 5-6**) are similar to the pattern at Van Wyck, which suggests that tolling is not changing the levels of vehicle exhaust at those sites.

Figure 5-6: Average NO2 Levels (Parts per Billion [ppb]) from Integrated Sampling Units at EJ-Designated Neighborhood Sites



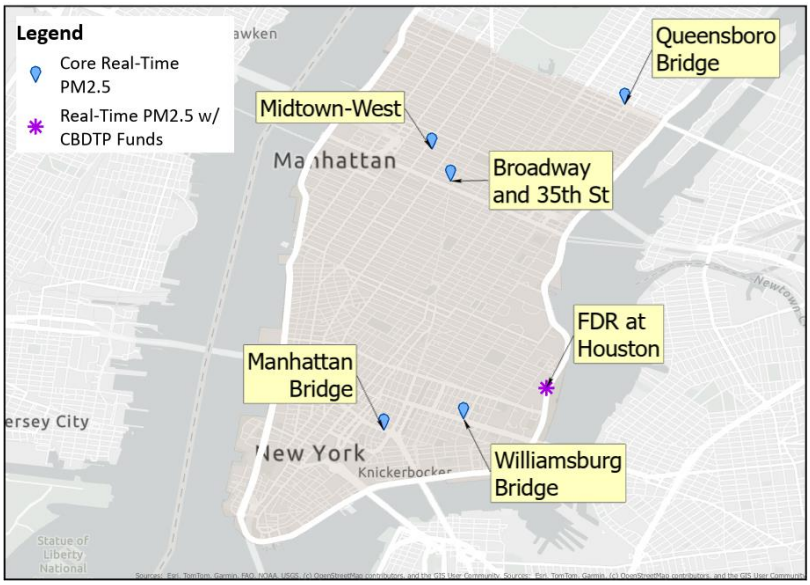
Sources: NYC Health Department and Queens College (CUNY), NYCCAS.

In July 2025, the NYC Health Department published an initial look at the real-time NYCCAS PM2.5 data and reported that PM2.5 levels were either steady or decreasing between October 2024 and March 2025 at sites inside and outside the CRZ, including at EJ-designated neighborhood sites, shown in the map in **Figure 5-7**.[35] With data now available through September 2025, all sites show patterns similar to those at the Van Wyck control site before and after tolling, with PM2.5 remaining relatively steady in the months immediately following implementation (**Figure 5-8** and **Figure 5-9**).[36] The increase in PM2.5 in June and July 2025 across all sites was likely due to smoke transported from the wildfires in Canada.

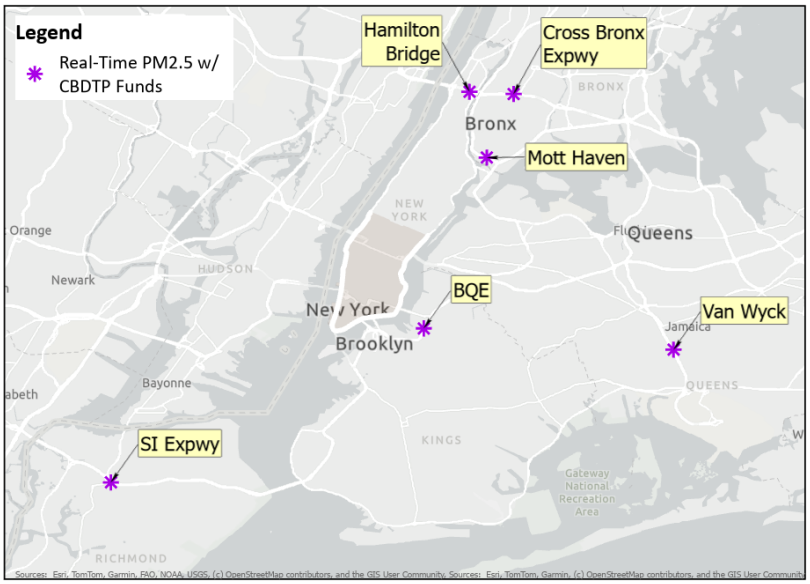
[35] Refer to "Initial data from Congestion Relief Tolling," available at https://a816-dohbesp.nyc.gov/IndicatorPublic/data-stories/congestion-tolling-update/.
[36] NYC Health Department and Queens College (CUNY), Real-Time Air Quality: PM2.5 in NYC, https://a816-dohbesp.nyc.gov/IndicatorPublic/data-features/realtime-air-quality/.

Figure 5-7. Map of Real-Time PM2.5 Monitoring Sites

Monitors Inside the CRZ

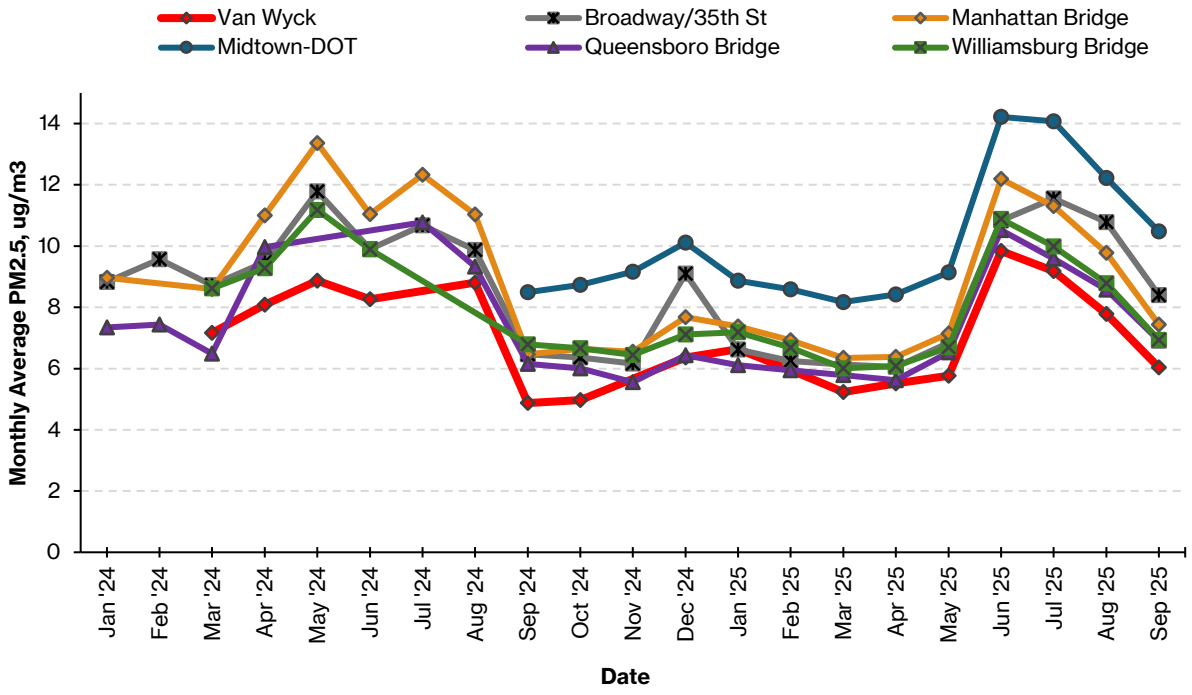


EJ-Designated Neighborhood and Control Sites Outside the CRZ



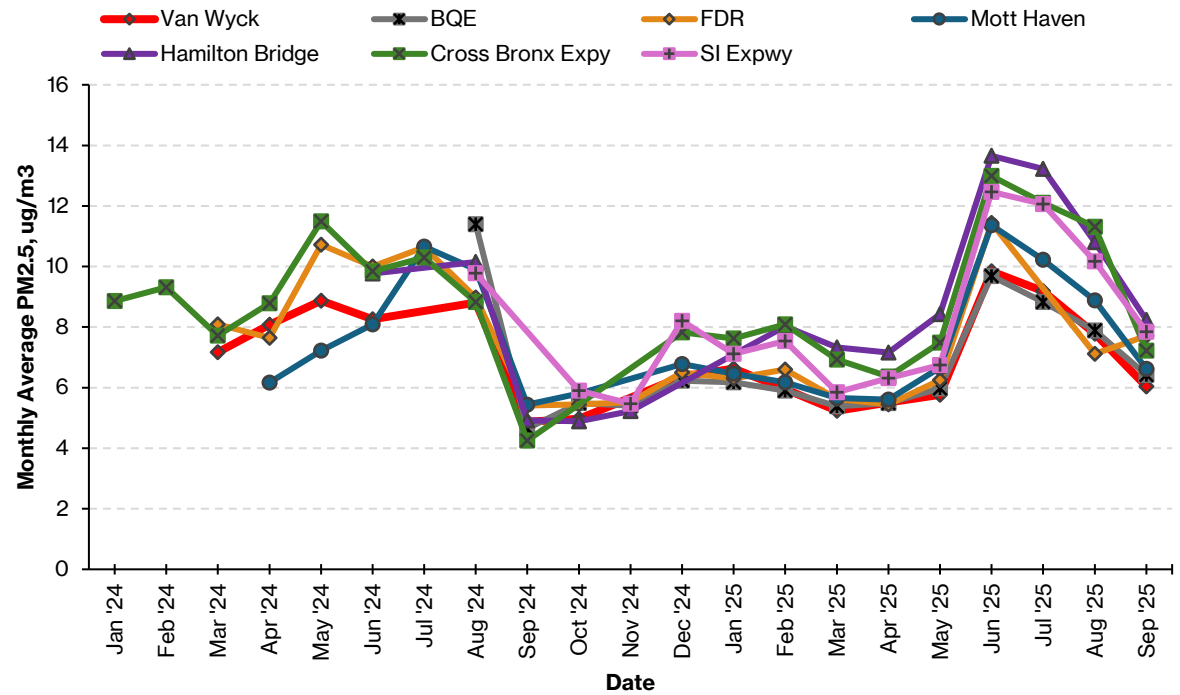
Sources: NYC Health Department, TBTA.

Figure 5-8. Average PM2.5 Levels (Micrograms per Cubic Meter [ug/m3]) at Real-Time Monitoring Sites in the CRZ and the Van Wyck Control Site



Source: NYC Health Department and Queens College (CUNY), NYCCAS.

Figure 5-9: Average PM2.5 Levels (Micrograms per Cubic Meter [ug/m3]) at Real-Time Monitoring Sites in EJ-Designated Neighborhoods and at the Van Wyck Control Site



Source: NYC Health Department and Queens College (CUNY), NYCCAS.

Were there any changes in traffic near the air quality monitoring sites?

Like air quality, traffic is impacted by many factors beyond just CRZ tolling. Weather, road closures, construction, regular maintenance, crashes and disabled vehicles, emergency response, and other events can all impact vehicle volumes. Given all these factors, some levels of variability in vehicle volumes at a given location are to be expected.[37] **Table 5-1** presents year-over-year traffic comparisons.

At six of the 10 traffic count sites near pollutant monitoring sites, all-vehicle traffic was flat or decreased between the spring of 2024 and 2025. Meanwhile, truck traffic declined, year-over-year, at all the count locations on highways where trucks are legally permitted.

All-vehicle traffic increased by 1.2 percent on the Trans-Manhattan Expressway, 1.2 percent on the FDR Drive at Houston St, 0.9 percent on the FDR Drive at Jackson Street, and 3.2 percent on the FDR Drive at Market Slip. Again, however, air pollution patterns in these areas appeared to be unaffected by tolling. At the Trans-Manhattan Expressway monitoring site and the FDR Drive monitoring sites, NO2 levels have fluctuated in parallel with those at the Van Wyck site (**Figure 5-6**).

[37] NYC DOT and Traffic Databank, Traffic Short Counts; NYSDOT, Traffic Data Viewer Multi-Day Volume Reports, https://nysdottrafficdata.drakewell.com/publicmultinodemap.asp; for traffic counts collected in other months and for information about how averages are calculated, see the **Appendix, Detailed Traffic Data for Air Quality Monitoring**.

Table 5-1: Traffic Counts on Highways Near NYCCAS Monitoring Sites in EJ-Designated Neighborhoods

Air Quality Monitoring Location	Traffic Count Site	Spring 2024 Avg Daily Total Traffic	Spring 2025 Avg Daily Total Traffic	Avg Daily Total Traffic % Change	Avg Daily Truck Traffic Spring 2024	Avg Daily Truck Traffic Spring 2025	Avg Daily Truck Traffic % Change
Hamilton Bridge	Trans-Manhattan Expwy	242,228	245,218	+1.2%	32,124	31,425	-2.2%
Cross Bronx Expwy	Cross Bronx Expwy at Jerome Avenue	146,231	135,379	-7.4%	23,481	22,463	-4.3%
Mott Haven	Major Deegan Expwy	137,480	127,741	-7.1%	11,251	10,212	-9.2%
FDR*	The FDR Dr at Houston St	149,939	151,762	+1.2%	-	-	-
FDR*	The FDR Dr at Jackson St	134,803	136,012	+0.9%	-	-	-
FDR*	The FDR Dr at Market Slip	123,035	126,932	+3.2%	-	-	-
BQE	BQE at Lee Ave	146,809	139,539	-5.0%	15,750	14,148	-10.2%
SI Expwy	I-278 Staten Island Expwy	187,750	187,525	-0.1%	13,198	12,673	-4.0%
SI Expwy	NY440 - MLK Expwy	38,080	37,585	-1.3%	2,619	2,313	-11.7%
Van Wyck	Van Wyck Expwy	158,758	158,491	-0.2%	9,799	9,074	-7.4%

Notes: "Spring" counts taken between Monday and Friday in either April, May, or June in 2024 and 2025; counts taken between Monday 6:00 a.m. and Friday 12:00 p.m. were used to create daily averages.
* Trucks are not permitted on the FDR Drive, though trucks travelling illegally on the FDR Drive make up approximately 0.1 percent to 0.4 percent of total traffic counted, depending on the month and location. This illegal activity varies substantially from month to month and so the numbers are not shown; the FDR Drive at Houston St is the traffic monitoring location closest to the pollutant monitors; counts at Jackson St added to address concerns; counts also added at Market Slip.
Sources: NYC DOT and Traffic Databank Traffic Short Counts; NYSDOT, Traffic Data Viewer Multi-Day Volume Reports; TBTA.

What are the early findings for air quality for the wider region?

The data presented below are collected via the AQS, which allows users to access data aggregated by the EPA and sourced from pollutant monitoring sites across the country. The following data represent PM2.5 and NO2 measures from all monitoring sites in the counties listed in **Table 5-2**. The counties in

New York, outside New York City, and New Jersey are a subset of the same 12-county area chosen for the Final EA; counties in Connecticut were also included to represent the region. Monitoring sites for each pollutant are not available in each county. Because data in AQS are not finalized until six months after the end of the quarter, at the time of writing, the latest data set available is for the first quarter of 2025.

Table 5-2: Monitoring Site Counties

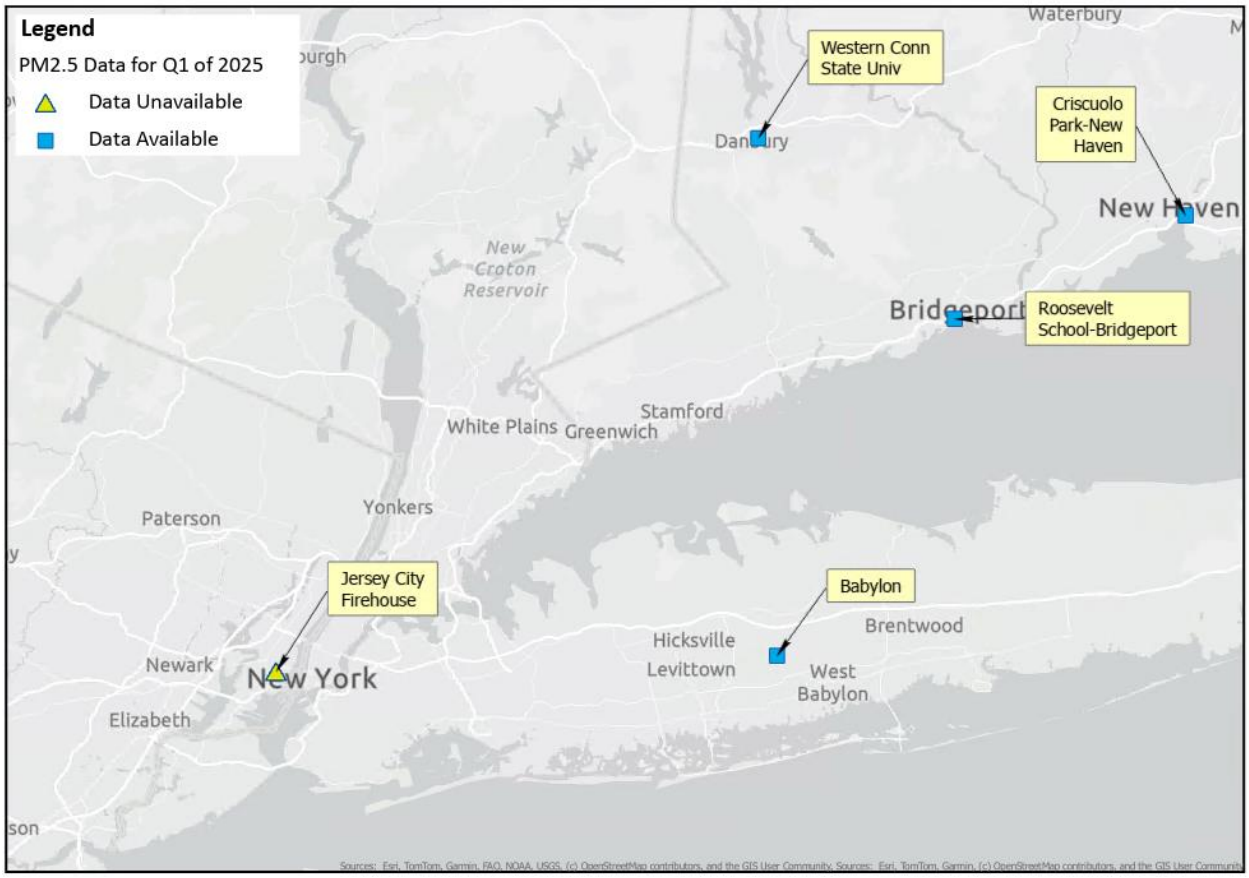
State Name	County Name
New York	Westchester, Nassau, Putnam, Rockland, Suffolk
New Jersey	Hudson, Bergen
Connecticut	Fairfield, New Haven

The Air Quality Index (AQI) is a scale used to measure and report daily air quality. It is calculated using the pollutant loads for numerous pollutants to provide people with a sense of how healthy or unhealthy the air quality is. Though AQI considers more than just those pollutants presented here, it provides a useful framework for the severity of each pollutant and its potential impact on health, providing a categorical assessment of the air quality impact for each pollutant. The AQI scales for PM2.5 and NO2 are presented in Tables 5-3 and 5-5, respectively.[38]

Figure 5-10 shows the location of monitoring sites measuring PM2.5 available in the counties of interest. **Table 5-4** shows the average value of PM2.5 at those monitoring sites for the first quarter of 2025. Data were not available in AQS at one monitoring location. At all four sites where data were available, the mean for first quarter 2025 was within the range of values seen in the first quarters of 2022-2024, prior to the implementation of CRZ tolling.[39]

[38] EPA (May 2024), Technical Assistance Document for the Reporting of Daily Air Quality – the Air Quality Index (AQI), https://document.airnow.gov/technical-assistance-document-for-the-reporting-of-daily-air-quailty.pdf.
[39] EPA, AQS, Accessed October 2025 from https://www.epa.gov/aqs.

Figure 5-10: Map of PM2.5 Monitoring Sites Outside New York City for Q1 of 2025



Sources: EPA, AQS; TBTA.

Table 5-3: AQI Categories for PM2.5 Levels (Micrograms/Cubic Meter [ug/m3])

Category	AQI	PM2.5, 24-Hour
Good	0-50	0.0-9.0
Moderate	51-100	9.1-35.4
Unhealthy for Sensitive Groups	101-150	35.5-55.4
Unhealthy	151-200	55-125.4
Very Unhealthy	201-300	125-225.4
Hazardous	301+	225.5+

Source: EPA, Technical Assistance Document for the Reporting of Daily Air Quality – the Air Quality Index (AQI).

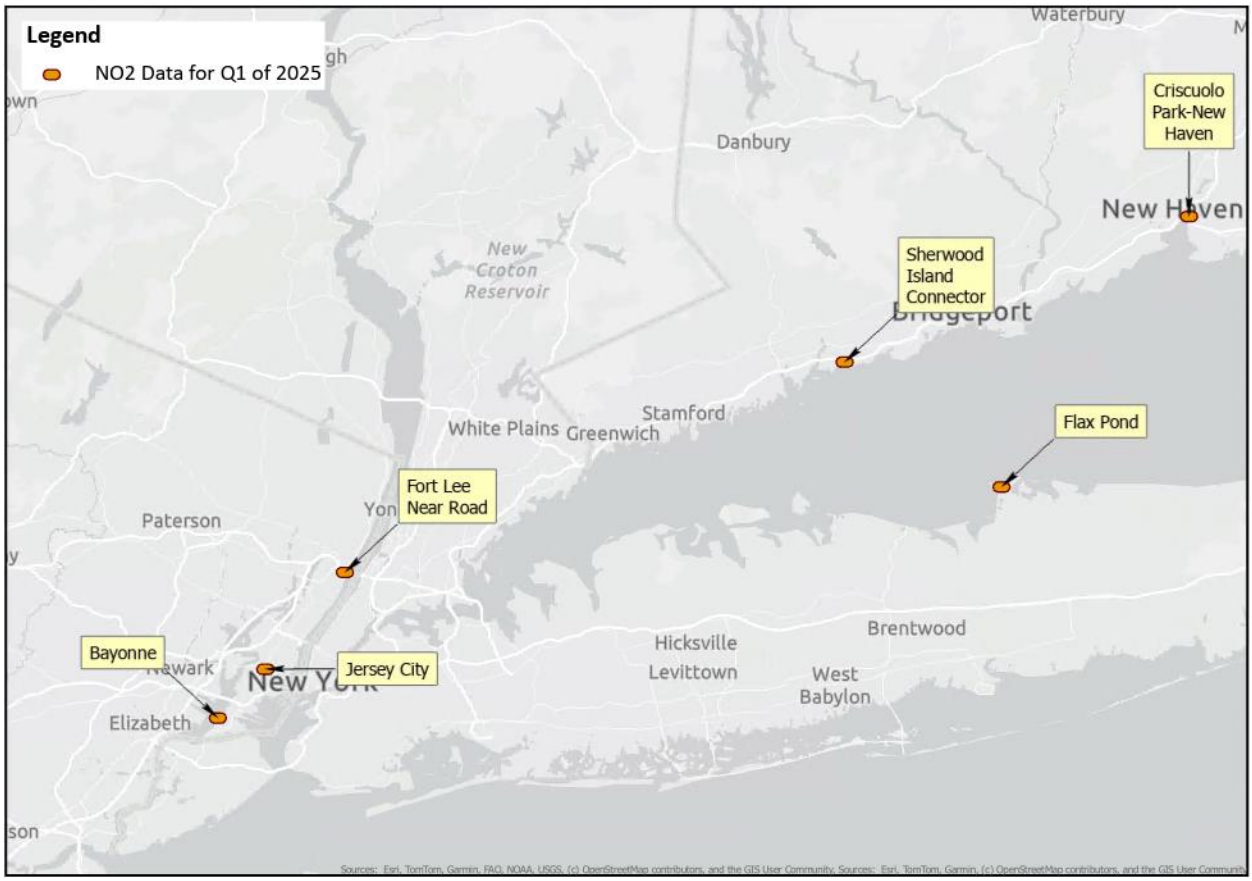
Table 5-4: PM2.5 Readings Q1 of 2025 (Micrograms/Cubic Meter [ug/m3])

State	County	Site Name	Arithmetic Mean	AQI Scale	Minimum – Maximum Range, Q1 from 2022 – 2024	Minimum Threshold for next AQI Category
New York	Suffolk	Babylon	5.9	Good	4.9-6.1	9.1
New Jersey	Hudson	Jersey City Firehouse	No Data	No Data	6.3-9.0	9.1
Connecticut	Fairfield	Western Conn State Univ	5.6	Good	4.9-8.7	9.1
Connecticut	Fairfield	Roosevelt School-Bridgeport	7.0	Good	5.8-7.7	9.1
Connecticut	New Haven	Criscuolo Park-New Haven	6.7	Good	5.1-6.8	9.1

Note: No data were reported for Q1 of 2025 at the Jersey City Firehouse monitoring site.
Source: EPA, AQS.

Figure 5-11 depicts the location of monitoring sites available for NO2 within the counties of interest. **Table 5-6** shows the mean value of NO2 at those monitoring sites for the first quarter of 2025. While some monitoring sites for NO2 were above the range of NO2 values for the first quarter from 2022-2024, none were above or close to the minimum threshold for "Moderate" AQI Category.

Figure 5-11: Map of NO2 Monitoring Sites Outside New York City for Q1 of 2025



Sources: EPA, AQS; TBTA.

Table 5-5: AQI Category to NO2 Measurement (Parts per Billion [ppb])

Category	AQI	NO2 1-Hour
Good	0-50	0-53
Moderate	51-100	54-100
Unhealthy for Sensitive Groups	101-150	101-360
Unhealthy	151-200	361-649
Very Unhealthy	201-300	650-1,249
Hazardous	301+	1,250+

Source: EPA, Technical Assistance Document for the Reporting of Daily Air Quality – the Air Quality Index (AQI).

Table 5-6: NO2 Readings Q1 of 2025, (Parts Per Billion [ppb])

State	County	Site Name	Arithmetic Mean	AQI Scale	Minimum Range – Maximum Range Q1 from 2022 – 2024	Minimum Threshold for Next AQI Quality Category
New York	Suffolk	Flax Pond	9.8	Good	10.6-12.6	54
New Jersey	Hudson	Jersey City	37.1	Good	33.7-36.2	54
New Jersey	Hudson	Bayonne	34.4	Good	29.2-33.9	54
New Jersey	Bergen	Fort Lee Near Road	33.4	Good	33.1-35.5	54
Connecticut	Fairfield	Sherwood Island Connector	24.5	Good	22.5-24.2	54
Connecticut	New Haven	Criscuolo Park-New Haven	27.8	Good	25.3-29.2	54

Source: EPA, AQS.

How have greenhouse gas emissions changed after CRZ tolling?

In addition to NO, NO2, BC, PM2.5, and O3, reporting for CRZ tolling also includes GHG emissions, or climate pollution, from vehicular traffic in the CRZ. Vehicular traffic is the source influenced by tolling entries to the CRZ. GHGs include carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O), which are reported together as metric tons of "CO2-equivalent." Like the other pollutants, GHG emissions come from a variety of sources in an urban area like New York City.

Unlike NO, NO2, BC, PM2.5, and O3, GHG emissions are estimated from changes in vehicle volumes, as there is no network of sensors that measure total GHG emissions across a neighborhood, city, or region. Estimates rely on:

- VMT (which is itself estimated, since no comprehensive data source exists for directly measuring VMT).
- The mix of electric vehicles and the fuel efficiency of internal-combustion vehicles in the local population or "vehicle fleet."
- Conversion rates that calculate the weight of CO2-equivalent emissions for every gallon of fuel consumed.

TBTA uses estimated GHG CO2-equivalent emissions from StreetLight Data, Inc.[40] Consistent with the VMT analysis, GHG estimates are derived from two data sources: Aggregated GPS (AGPS) and Connected Vehicle Data (CVD).

Quarterly total GHG estimates (in metric tons) and indexed GHG values, averaged across AGPS and CVD, are summarized in **Table 5-7**. Compared with 2024, total estimated GHG emissions from vehicles through the third quarter of 2025 were 6.1 percent lower in the CRZ, 3.4 percent lower on excluded roadways, and 5.3 percent lower across the CRZ and excluded roadways combined.

[40] A brief description of StreetLight Data, Inc.'s methodology is available at https://www.streetlightdata.com/ghg-measurement/; a detailed description can be found in the "StreetLight Greenhouse Gas Emissions Methodology and Validation White Paper," available at https://learn.streetlightdata.com/ghg-whitepaper.

Table 5-7: Change in Quarterly Total GHG Estimates (Metric Tons of CO2 Equivalent) and Indexed GHG, January 2024 through September 2025

Congestion Relief Zone

Year	Quarter	Total AGPS	Total CVD	Indexed AGPS	Indexed CVD	Indexed Average
2024	Q1	108,520	97,933	100	100	100
2024	Q2	111,867	93,225	103	95	99
2024	Q3	108,998	88,301	100	90	95
2024	Q4	110,602	93,694	102	96	99
2025	Q1	105,778	81,460	97	83	90
2025	Q2	108,330	87,337	100	89	95
2025	Q3	105,344	84,859	97	87	92
2024	Q1 - Q3	329,385	279,460	100	100	100
2025	Q1 - Q3	319,453	253,656	97	91	94

Excluded Roadways

Year	Quarter	Total AGPS	Total CVD	Indexed AGPS	Indexed CVD	Indexed Average
2024	Q1	53,508	45,043	100	100	100
2024	Q2	56,086	43,402	105	96	101
2024	Q3	53,813	40,472	101	90	95
2024	Q4	56,094	43,623	105	97	101
2025	Q1	52,274	40,219	98	89	93
2025	Q2	55,293	42,275	103	94	99
2025	Q3	53,234	39,621	99	88	94
2024	Q1 - Q3	163,407	128,917	100	100	100
2025	Q1 - Q3	160,801	122,114	98	95	97

Congestion Relief Zone + Excluded Roadways

Year	Quarter	Total AGPS	Total CVD	Indexed AGPS	Indexed CVD	Indexed Average
2024	Q1	162,028	142,975	100	100	100
2024	Q2	167,953	136,627	104	96	100
2024	Q3	162,811	128,773	100	90	95
2024	Q4	166,696	137,318	103	96	99
2025	Q1	158,052	121,679	98	85	91
2025	Q2	163,623	129,612	101	91	96
2025	Q3	158,578	124,480	98	87	92
2024	Q1 - Q3	492,792	408,376	100	100	100
2025	Q1 - Q3	480,254	375,770	97	92	95

Source: StreetLight Data, Inc. GHG Emissions.

Conclusion

Without a full year of air quality data, it is too early to draw definitive conclusions about air quality changes following the implementation of CRZ tolling. Preliminary findings, however, indicate that pollutant levels at monitoring sites in EJ–designated neighborhoods analyzed by TBTA and NYC Department of Health remain consistent with recent historical trends and with trends at a monitoring site not affected by tolling. GHG emissions within the zone are modeled as having declines in line with reductions in VMT. Once a full year's worth of data are available for analysis, TBTA and the NYC Health Department will publish a report with more conclusions on the program's effects on air quality.

Revenue and Expenses

In addition to reducing congestion in the CRZ, net operating revenues from CRZ tolling provide critical funding for capital improvements that strengthen and modernize the MTA's transit network. In its first year of operation, CRZ tolling is predicted to generate net operating revenue of at least $500 million. To date, the program remains on track to meet this revenue projection.

Monthly toll revenue is expected to fluctuate seasonally in line with traffic patterns (see the Traffic and Congestion chapter). **Table 6-1** includes monthly actuals through October. For 2025 YTD, monthly revenue averaged $57.3 million and monthly expenses averaged $10.5 million. Net revenue represents toll revenue less operating expenses. Operating expenses exclude debt service related to CRZ infrastructure financing of approximately $1.6 million per month. There were $33.9 million in operating expenses incurred prior to the start of tolling.

Table 6-1: CRZ Tolling Revenue and Program Expenses, January through October 2025 (Unaudited, $ in millions)

Month	Toll Revenue	Operating Expenses	Net Revenue
January	48.7	11.1	37.6
February	51.9	11.5	40.4
March	58.4	13.5	44.9
April	56.7	10.8	45.9
May	61.0	10.9	50.1
June	58.1	8.7	49.4
July	57.5	8.7	48.8
August	57.0	9.5	47.5
September	58.0	11.7	46.3
October	65.8	8.9	56.9
Total	**573.1**	**105.3**	**467.8**

Note: Figures may not add due to rounding.

In addition to the operating expenses described in **Table 6-1**, as of October 31, 2025, capital expenditures related to CRZ infrastructure financed with proceeds of infrastructure financing totaled $365.9 million.

Use of CRZ net operating revenue collected through October 2025

Of the $467.8 million of CRZ net revenue collected through October 2025, TBTA has applied $15.8 million to pay interest on notes used to finance CRZ infrastructure costs, and $145.7 million to retire maturing notes used to fund CRZ infrastructure costs on November 3, 2025. TBTA has set aside $20 million for expected mitigation expenses, and has $10.1 million of funds on hand and receivables, with the balance of $276.2 million deposited in an account as collateral for a $500 million CRZ loan taken out to finance eligible transit and commuter capital projects.

What transit improvements will CRZ Tolling Program revenue fund?

Under the Traffic Mobility Act, which requires TBTA to establish and operate the Central Business District Tolling Program (herein referred to as "CRZ tolling"), the program must generate net annual revenues sufficient to fund $15 billion for MTA's transit and commuter rail capital projects included in the 2020–2024 MTA Capital Program.

MTA is actively advancing projects supported by this funding, including Second Avenue Subway Phase 2, new rolling stock for LIRR and MNR, ADA accessibility upgrades, and key state-of-good-repair and system improvement projects.

In 2025, TBTA incurred $1 billion of short-term debt to finance eligible MTA transit and commuter projects that will be retired by future bonds backed by CRZ tolling revenue. This is in addition to $378.8 million of previously issued notes to finance CRZ infrastructure costs. **Table 6-2** identifies $4.5 billion of 2020-2024 MTA capital projects that have been recently committed to and may be funded, in whole or in part, as spending progresses, with CRZ tolling revenue or debt secured with expected CRZ tolling revenues. As of November 19, 2025, $495.9 million of the proceeds have been spent on eligible transit and commuter capital projects.

Proceeds from CRZ tolling will enable MTA to expand and modernize the system, enhance accessibility, and maintain the state-of-good-repair of the existing network. The $4.5 billion of projects set forth in **Table 6-2** is the first step to committing to and funding the full $15 billion of transit and commuter capital projects required to be funded by the CRZ program.

Table 6-2: $4.5 Bn of Recently Committed MTA 2020-2024 Transit and Commuter Capital Projects Supported by the CRZ Program ($ in millions)

Project Category	Amount	Project Highlights
Communications & Signals	$20.2	• LIRR Babylon Interlocking Renewal • NYCT fiber optic network & antenna cable
Second Ave Subway 2	$974.4	• Contract 2: Heavy Civil - 125th TBM Tunnel • Construction Management
Line Equipment & Structures	$283.0	NYCT Line Equipment and Structures Repair: • Line structure component repairs at various locations • Elevated Structure Repairs: Overland sections • Tunnel lighting & line structure repairs - 8th Ave • Paint and Steel Repair - Culver Line • Replacement of electrical/mechanical equipment - S. Channel Bridge • Woodside Structures
Passenger Stations	$379.6	• NYCT: Replace 56 elevators, platform components, and station renewal at various locations • LIRR Babylon Station Platforms
Passenger Stations Accessibility Improvement	$928.7	NYCT Accessibility Improvements: • ADA 36th St/4th Ave, ADA 33rd St Rawson St Station/Flushing, ADA 46th St-Bliss St/Flushing, ADA Burnside Ave/JER, ADA 167th St/Concourse, ADA Kingsbridge Rd/Jerome LIRR Accessibility Improvements: • ADA Hollis Station, ADA Forest Hills Platform Extension
Penn Station Access	$287.7	• Design-build • Locomotive purchase
Power	$209.3	NYCT Substation and CBHs: • Washington Heights substation renewal • 5 CBH rehabilitation LIRR and MNR substations: • LIRR Jamaica Substation • MNR Rebuild 2 NHL AC Substations • MNR Pelham substation NHL replacement
Rolling Stock	$941.5	• LIRR & MNR M-9A Cars • NYCT R211 Cars Options 1&2
Shops & Yards	$2.7	• Livonia Maintenance Shop Phase I
Track & Structures	$157.2	• LIRR Annual track programs • NYCT & SIR track replacement • MNR Park Avenue viaduct replacement
Bus Purchase	$333.9	• Purchase 177 standard electric buses • Purchase 18 articulated electric buses • Purchase 265 battery electric buses

Note: Reflects "committed" projects with funds formally obligated through contracts or agreements. Table may differ from the list of projects on the MTA Capital Dashboard under "Enabled by Congestion Relief" at https://capitaldashboard.mta.info/initiatives. "Enabled" projects are projects made possible as a result of the CRZ tolling program, regardless of whether contracts or agreements funded by the program are in place.

Mitigation and Monitoring

The Project Sponsors are delivering on a variety of monitoring and mitigation commitments made in the Value Pricing Pilot Program (VPPP) Tolling Agreement, Final Environmental Assessment (EA), and Finding of No Significant Impact (FONSI), as well as Revaluations 1 and 2.[41]

This chapter provides additional information on each of these commitments, including progress in delivering mitigation measures to address environmental-justice (EJ) concerns, as well as findings from monitoring for a variety of potential adverse effects on the transportation network.

Place-Based, Regional, and Ongoing Engagement Mitigation Measures and Enhancements, to address EJ concerns

The Project Sponsors hold regular meetings with groups representing EJ-designated communities and small businesses. The Project Sponsors are also implementing projects and programs valued at $100 million to benefit those communities identified in the Final EA and Reevaluation 1 as already experiencing pre-existing high pollutant and chronic disease burdens and that could potentially experience increases in highway truck traffic because of CRZ tolling. The Final EA refers to these as "place-based mitigation measures." Crucially, the Project Sponsors are making these investments regardless of whether or not traffic increases have occurred on the highways in these communities.

In addition, the expansion of New York City's Clean Trucks Program, discounted overnight toll rates, the low-income discount plan (LIDP), and expansion of NYC DOT programs that reduce emissions from trucks provide additional benefits to the region, known as "regional mitigation measures."

Ongoing Engagement

TBTA, NYC DOT, and NYSDOT have established two stakeholder groups and are meeting with them on an ongoing basis: the Environmental Justice Community Group (EJCG) and the Small Business Working Group (SBWG).

The EJCG meets on a quarterly basis; these meetings provide meaningful opportunities for participation and engagement related to EJ by sharing updated data and program information, listening to concerns, and seeking feedback. The EJCG comprises representatives from various organizations rooted in communities across the five boroughs of New York City, Nassau County, New York, and New Jersey's Bergen, Hudson, Essex, and Union Counties.

The SBWG was established in recognition of the concerns of small businesses on the effects of CRZ tolling. Meetings began prior to the start of tolling and are a way to share information about the tolling program and to solicit ongoing feedback on how businesses are being affected. The SBWG brings

[41] All the documents where the Project Sponsors make those commitments refer to CRZ tolling as the CBD Tolling Program; this chapter uses the term CRZ tolling for the CBD Tolling Program to be consistent with the rest of this report.

together the Manhattan Chamber of Commerce and business improvement districts (BIDs) in the CRZ, as well as along its northern edge in Manhattan.

Table 7-1 describes the organizations invited to join each group, and **Table 7-2** lists the dates when meetings of each group have taken place as well as the major topics of discussion at each meeting.

Table 7-1: Organizations Invited to the EJCG and SBWG Meetings

EJCG	SBWG
• ALIGN • American Indian Community House • Asian American Federation Bronx Neighborhood Health Center • Chhaya • Community Voices Heard • El Puente • ERASE Racism New York • GOLES • Hispanic Federation • Ironbound Community Corporation • Make the Road New York • NAACP – Long Island Region • NAACP – Metropolitan Council Region, NY • NAACP – NJ State Conference • National Action Network • Neighborhood Initiatives Development Cooperation • New Jersey Environmental Justice Alliance • New York Environmental Justice Alliance • Northern New Jersey Community Foundation • South Bronx Unite • South Ward Environmental Alliance • Staten Island Urban Center • The HOPE Program • The Point CDC • United Jewish Organizations of Williamsburg and North Brooklyn • UPROSE • Urban Indigenous Collective • Urban League of Bergen County • Urban League of Essex County • Urban League of Hudson County • Urban League of New York • Urban League of Union County • WE ACT for Environmental Justice • WE STAY/Nos Quedamos • Youth Ministries for Peace and Justice (YMPJ)	• Alliance for Downtown New York • East Midtown Partnership • Fifth Avenue Association • Flatiron NoMad Partnership • Garment District Alliance • Grand Central Partnership • Hudson Square BID • Hudson Yards Hell's Kitchen Alliance • Lincoln Square BID • Madison Avenue BID • Manhattan Chamber of Commerce • Meatpacking District BID • NoHo BID • SOHO Broadway Initiative • Time Square Alliance • Village Alliance • West Village BID • Union Square Partnership • Lower East Side Partnership • Chinatown BID • Diamond District Partnership • 34th Street Partnership/Bryant Park Corporation

Table 7-2: Meetings Held to Date with the EJCG and SBWG

EJCG

Meeting Dates	Topics Discussed
02/24/24	Shared information about the tolls, exemption and discount plans, monitoring and mitigation, took questions, listened to member concerns.
12/16/24	Why CRZ tolling; transit improvements; how we got here; final toll rates; discount and exemption plans; mitigation overview; air quality monitoring.
03/20/25	Initial traffic results, air quality monitoring details, and mitigation implementation status.
06/25/25	Trends in vehicle entry reduction, updated traffic results, preliminary air quality data, discount and exemption plan enrollment, and mitigation implementation status.
09/16/25	Trends in vehicle entry reductions and speeds on river crossings, trends in transit performance, upcoming evaluation report, and public dashboards, and place-based mitigation site selection process.
12/09/25	Trends in vehicle entry reductions, overview of publicly available data, updates on exemption and discount plans, and mitigation implementation status

SBWG

Meeting Dates	Topics Discussed
01/22/24	Overview of CRZ tolling, business-specific considerations, and timeline and future plans.
12/18/24	Overview of the program and toll rates, discount and exemption plans, and what CRZ tolling means for small businesses.
07/30/25	Traffic and economic trends; what BID staff have been hearing from businesses in their districts; how BIDs could share traffic and pedestrian data that they collect with NYC DOT; how BIDs can help disseminate information about CRZ tolling and NYC DOT programs to their respective members.

Note: The EJCG meets every quarter, with the next meeting to take place in the first quarter of 2026; the SBWG meets annually, with the next meeting in summer 2026.

Place-based Mitigation Measures

One hundred million dollars in projects and programs are underway or in planning stages to benefit these communities: Crotona-Tremont, High Bridge-Morrisania, Hunts Point-Mott Haven, Northeast Bronx, Pelham-Throgs Neck, Downtown Brooklyn-Fort Greene, South Williamsburg, East Harlem, Randall's Island, Newark, City of Orange, East Orange, and Fort Lee. **Figure 7-1** depicts the locations of these communities.

Figure 7-1: The 13 Communities Eligible for Place-Based Mitigation

Note: Community boundaries are those from the EJ analysis conducted in the Final EA and Reevaluation 1. For more information, see FHWA (June 2023), CBD Tolling Program Final EA Appendix 17D, "Technical Memorandum –Considerations for Environmental Justice Communities with Existing Pollution or Health Burdens", footnote 68, p. 17D-29 and footnote 101, p. 17D-50 at https://www.mta.info/document/111056.

Sources: TBTA; HDR.

These place-based mitigation measures are:

- Installing or upgrading air filtration systems in schools near highways to improve indoor air quality.
- Installing roadside vegetation to capture pollutants and improve air quality near roads.
- Renovating parks and green spaces to increase overall community well-being.
- Expanding the New York City (NYC) Asthma Case Management Program and establishing a Bronx Asthma Center to reduce hospitalizations and doctor visits, and reduce childhood asthma emergency room visits, symptoms, and missed school days.
- Replacing old, dirty, diesel-burning transport refrigeration units (TRUs) at Hunts Point Produce Market with cleaner vehicles for major reductions in nitrogen dioxide and nitric oxide (NOx) and PM2.5 emissions, all of which are pollutants linked to chronic disease. TBTA and NYC DOT estimate that every TRU replaced removes the NOx emissions of 70 truck trips and the PM2.5 emissions of 330 truck trips on the Cross Bronx Expressway every day.[42]
- Implementing an electric truck charging infrastructure program that serves trucks travelling around the region, facilitating the transition from diesel-burning trucks to electric trucks, and thereby reducing NOx and PM2.5 emissions.

Finally, TBTA completed a place-based measure to mitigate a potential increase in traffic on the Franklin D. Roosevelt (FDR) Drive along the Lower East Side and Lower Manhattan communities. Specifically, since January 5, 2025, the CRZ tolling has tolled vehicles traveling northbound on the FDR Drive that exit at East Houston Street and then travel southbound on the FDR Drive. The TBTA Board adopted a policy that tolls these vehicles because modeling for the Final EA and Reevaluation 1 predicted increased traffic on the FDR Drive, in part, by vehicles taking this route to avoid the toll, which would be mitigated by tolling this movement.

Progress on Siting the Place-Based Mitigation Measures

All 13 communities identified for place-based mitigation across New York and New Jersey are eligible to receive investment in upgraded school air-filtration systems,[43] renovated parks and green spaces, and roadside vegetation air-filtration; communities within New York are eligible for electric truck-charging infrastructure. In determining the site selection process of place-based mitigation measures, the Project Sponsors are engaging with local government officials, relevant agencies, the EJCG, and other stakeholders for input. The site selection process involves aligning place-based mitigation measures with the funding allocation of 13 communities following a distribution of funds based on each community's population, as established in Reevaluation 1.

The Project Sponsors have been working with local government officials and relevant agencies in New York and New Jersey to analyze existing conditions and assess the suitability of mitigation measures for

[42] TBTA and NYC DOT (February 2025), Estimated Air Quality Benefits of TRU Replacement.
[43] Provided that there are schools located within 300 meters of highways where forecasting in the Final EA and Reevaluation 1 projected increases in truck traffic, which is a criterion for this measure.

the communities. Through this collaboration, Project Sponsors are in the process of identifying sites and developing budgets. The Project Sponsors have engaged with the EJCG at the quarterly meetings to get input on the site selection process. **Table 7-3** describes the status of these measures at the time of writing.[44]

Regional Mitigation Measures

CRZ tolling is providing additional benefits to the region by:

- Expanding the NYC Clean Trucks Program, which offers incentives for replacing diesel trucks that travel around the region with lower-emission electric, hybrid, compressed natural gas, and clean diesel vehicles, reducing NOx and PM2.5 emissions.[45]
- Expanding the NYC DOT Off-Hour Deliveries Program, which offers incentives to help businesses switch their deliveries from daytime to nighttime hours. Switching delivery times reduces daytime truck traffic, reduces emissions, and increases roadway safety.[46]
- Making the overnight toll 75 percent below the peak rate. The overnight toll rate is in effect from 9 p.m. to 5 a.m. on weekdays and from 9 p.m. to 9 a.m. on Saturdays and Sundays. The deeply discounted toll rate, charged over eight or 12 hours of the day, minimizes or avoids truck diversions through communities around the CRZ.
- Providing a toll discount of 50 percent to qualified low-income frequent drivers with an E-ZPass toll plan (LIDP) after the first 10 trips in each calendar month (excluding the overnight period).[47]

Progress in planning and implementing these measures is described in **Table 7-3**.

[44] Up-to-date information on the status of CRZ tolling mitigation measures is available at https://www.mta.info/project/cbdtp/mitigation.
[45] Information about the NYC Clean Trucks Program, including application materials, can be found at https://www.nycctp.com/.
[46] CRZ tolling's Final EA and Reevaluation 1 referred to this program as the "Off-Hours Delivery Program." Its proper title is the "Off-Hour Deliveries" program. More information about the program is available at https://ohdnyc.com/.
[47] Additional information about LIDP, including application materials, can be found at https://www.mta.info/fares-tolls/tolls/congestion-relief-zone/discounts-exemptions/low-income-discount-plan.

Table 7-3: Regional and Place-Based Mitigation Measures with Status Updates

Mitigation Measure	Benefit and Result of Mitigation	Implementation Partners	5-Year Funding[1]	Status
Further reduced overnight toll	Minimize/avoid truck diversions	TBTA	N/A[2]	Complete
Expand NYC Clean Trucks Program	NOx and PM2.5 reductions from ~500 new clean trucks	TBTA, NYC DOT	$20 million	Implementation in progress NYC DOT will begin accepting new applications for rebate incentives in Q1 2026.
Expand NYC DOT Off-Hours Delivery Program	Safety and emissions reduction benefits resulting from reduced truck traffic during the day	TBTA, NYC DOT	$5 million	Implementation in progress NYC DOT will begin onboarding new participants in Q1 2026.
Toll vehicles traveling northbound on the FDR Drive that exit at East Houston Street and then travel southbound on FDR Drive	25 to 35 percent of the non-truck traffic increases on the FDR Drive could be mitigated	TBTA	N/A	Complete
Replacement of TRUs at Hunts Point Produce Market	Major NOx and PM2.5 reductions from the replacement of up to 1,000 TRUs	TBTA, NYC DOT	$15 million[3]	Implementation in progress NYC DOT began accepting applications for TRU replacements in October 2025; the first new unit was delivered in December 2025.
Implement Electric Truck Charging Infrastructure	NOx and PM2.5 reductions from electric vehicles using 35 new chargers (at seven stations)	TBTA, NYSDOT, NYC DOT, NYCEDC,	$20 million[4]	Planning in progress Preliminary identification of appropriate programs and sites in the Bronx and Brooklyn is underway; coordinating with City and state agencies and site owners on feasibility, stakeholder engagement, and preliminary scope, schedule, and budgets.
Install Roadside Vegetation to Improve Near-Road Air Quality	Improves near-road air quality by pollutant capture from ~4,000 trees and ~40,000 shrubs	TBTA, NYSDOT, City of Orange, City of Newark	$10 million	Planning in progress Preliminary identification of sites underway; Newark stakeholder engagement conducted, and planning for stakeholder engagement for other locations
Renovate Parks and Greenspace in EJ Communities	Increases overall community well-being. 2-5 park/ greenspace renovations, depending on size and complexity.	TBTA, NYC DOT, NYC Parks, Borough of Fort Lee, City of Orange	$25 million	Planning in progress Fort Lee stakeholder engagement conducted; preliminary planning and identification of sites underway for NYC Parks, with stakeholder engagement in 2026

Mitigation Measure	Benefit and Result of Mitigation	Implementation Partners	5-Year Funding[1]	Status
Install Air Filtration Units in Schools Near Highways	Removes air pollutants from classrooms. 25-40 schools, depending on school size and complexity of existing HVAC system.	TBTA, NYC DOT, New York City Department of Public Schools, Newark Board of Education, Orange Board of Education	$10 million	Planning in progress Preliminary identification of potential schools completed in Newark and NYC; implementation following stakeholder engagement
Establish Asthma Case Management Program and Bronx Asthma Center	Reduces hospitalizations and doctor visits, decreases days and nights with symptoms and missed school days–expands the program from 15 schools to 25 schools.	TBTA, NYC Department of Health	$20 million	Implementation in progress The Bronx Asthma Center will begin delivering programming to Bronx communities in Q3 2026; initial staff for the expansion of the Asthma Case Management Program will be hired in Q1 2026

Notes:

1. An additional $5 million has been allocated for mitigation and enhancement measures related to monitoring other topics. Enhancement measures include air quality monitoring that expanded NYC's existing monitoring network, as discussed above in the "Air Quality" chapter.
2. While the Project Sponsors are investing CRZ tolling funds into the other regional and place-based mitigations, the further reduced overnight toll is toll revenue that the program foregoes by having a longer overnight toll period with toll rates that are 75 percent lower than the peak toll rates, over and above the 50 percent reduction committed to in the Final EA, and FONSI.
3. In the Final EA, MTA Congestion Mitigation and Air Quality Improvement Program (CMAQ) funds were identified for replacement of TRUs at Hunts Point Produce Market; the source has changed, but not the amount of funding.
4. This measure is funded with $10 million from NYSDOT and $10 million from CRZ tolling.

Prioritizing equity in improving bus service in New York City

TBTA has committed to prioritizing equity in improving bus service in New York City as an enhancement. Specifically, TBTA committed to working with NYCT to address areas identified in the Final EA where bus service could be improved as the Brooklyn and Manhattan Bus Network Redesigns move forward.

TBTA worked with NYCT's Bus Network Redesign team to identify areas of Brooklyn with concentrations of individuals who commute by automobile to the CRZ and who are part of low-income households. As part of the Brooklyn Bus Network Redesign's upcoming Proposed Final Plan, NYCT intends to propose increased frequency and new routes in these areas to the extent that available resources allow. In addition, bus priority improvements, which require collaboration with NYC DOT, have also been identified for certain corridors. These improvements could include dedicated bus lanes, busways, queue jump intersections, transit signal priority, pedestrian safety elements, and accessibility upgrades at bus stops.

When the Manhattan Bus Network Redesign project begins, NYCT will incorporate data from after the implementation of CRZ tolling as it develops proposals for the redesigned bus network.

Prioritizing the NYCT Kingsbridge and Gun Hill Depots for zero-emission buses

As part of its overall transition to a zero-emission bus fleet, NYCT is prioritizing that transition at two bus depots in Upper Manhattan and the Bronx: the Kingsbridge Depot and Gun Hill Depot, both of which are in and provide service to EJ neighborhoods. In the Final EA and Reevaluation 1, the Project Sponsors highlighted TBTA's coordination with NYCT to make these depots a priority. The multi-year transition to a zero-emission bus fleet is ongoing, and the MTA has prioritized the Gun Hill Depot and Kingsbridge Depot for these buses.

Per-trip charge plan for taxi and FHV trips to, from, within, and passing through the CRZ

Though not a regional or place-based mitigation, CRZ tolling has implemented its EJ mitigation for taxi and FHV drivers. Because taxi and FHV drivers are largely a racial and/or ethnic minority population, MTA committed to ensuring that the toll structure adopted would not toll taxis or FHVs more than one passenger vehicle toll per day in the Final EA.

Under the approved tolling schedule, FHV dispatching bases and taxi Technology System Providers (TSPs) licensed with the TLC are eligible to have vehicles either dispatched by their base or use their meter system to charge a small charge for every trip to/from/within/through the CRZ instead of the daily toll. Based on the average number of trips taxis and FHVs make each day, the toll amount for taxis and FHVs is equivalent to the once-daily toll rate for automobiles. In addition, the adopted toll structure requires the cost of the toll to be paid by the passenger rather than the taxi or FHV driver. High-volume FHVs enrolled in the Per-Trip Charge Plan (PTCP) are subject to a $1.50 charge for each CRZ trip. Yellow taxis, green cabs, and other FHVs are subject to a $0.75 charge for each CRZ trip. Eligible companies enrolled in the PTCP collect the per-trip charges from passengers on all CRZ trips and remit them to MTA.

Monitoring Results and Mitigations/Enhancements

In the Final EA, the Project Sponsors committed to monitoring for a variety of potential adverse effects and, if necessary, mitigating those effects.[48] **Table 7-4** summarizes the monitoring undertaken and mitigation measures to be implemented, if necessary, followed by more detail for each

Table 7-4: CBD Tolling Program Monitoring Status

Topic	Locations Monitored for Potential Adverse Effects	Monitoring Status	Adverse Effect Found?	Mitigation Implemented?
Transit Station Stairs and Escalators	1. Times Sq-42 St/42 St-Port Authority Bus Terminal subway station in the CBD (N, Q, R, W, and S; Nos. 1, 2, 3, and 7; and A, C, E lines) – Stair ML6/ML8 2. Flushing-Main St subway station, Queens (No. 7 line) – Escalator E456 3. 14 Street-Union Square subway station in the CBD (Nos. 4, 5, and 6; and L, N, Q, R, W lines) – Escalator E219 4. Court Square subway station, Queens (No. 7 and E, G, M lines) – Stair P2/P4 5. PATH Hoboken station – Stair 01/02	Complete	Yes, 1 escalator at 14 St-Union Sq station	Yes, in November 2025
Pedestrian Circulation	1. West sidewalk along Eighth Ave between 34 St and 35 St 2. North crosswalk at Seventh Ave and 32 St 3. North crosswalk at Sixth Ave and 34 St	To be completed early 2026	Monitoring to be completed in early 2026	Monitoring to be completed in early 2026
Traffic – Highways	1. WB Long Island Expwy (I-495) near the Queens Midtown Tunnel 2. Approaches to WB George Washington Bridge on I-95 3. SB and NB FDR Dr btw East 10th St and Brooklyn Br	Complete	No	No mitigation required
Traffic – Intersections	1. Trinity Pl and Edgar St 2. East 36th St and Second Ave 3. East 37th St and Third Ave 4. East 125th St and Second Ave	Complete	Yes, East 36th St and Second Ave	Yes, in August 2025

[48] CBD Tolling Program Reevaluation 1 (June 2024), pp. 3 - 19, https://www.mta.info/document/142711.

Stairs and escalators at five transit stations

In the Final EA and Reevaluation 1, the CRZ tolling Project Sponsors committed to monitoring for and—if necessary—mitigating for adverse effects from tolling on stairs and escalators in transit stations.

Modeling conducted for the Final EA indicated that pedestrian volumes could increase and cause increased crowding to unacceptable levels (an adverse effect) on certain stairs and escalators at five transit stations. These locations were:

1. Times Sq-42 St/42 St-Port Authority Bus Terminal subway station in the CBD (N, Q, R, W, and S; Nos. 1, 2, 3, and 7; and A, C, E lines) – Stair ML6/ML8
2. Flushing-Main St subway station, Queens (No. 7 line) – Escalator E456
3. 14 Street-Union Square subway station in the CRZ (Nos. 4, 5, and 6; and L, N, Q, R, W lines) – Escalator E219
4. Court Square subway station, Queens (No. 7 and E, G, M lines) – Stair P2/P4
5. PATH Hoboken station – Stair 01/02

Modeling in Reevaluation 1 for Phase 3 of the toll schedule adopted in November 2024 found that adverse effects may occur at the four New York City Transit subway stations, but not at the PATH Hoboken station. However, the Project Sponsors committed to monitoring all these locations and, if needed, to mitigate by implementing certain mitigation measures for adverse effects.

Monitoring consisted of taking passenger counts on these stairs and escalators before and after tolling began. Counts before tolling occurred in November and December of 2024, and after-tolling counts took place, first, in March 2025 at Hoboken Station, and then again in May 2025, when counts were also taken at the four NYCT stations. After-tolling counts were seasonally adjusted for comparison.

The Final Environmental Assessment (EA) analyses, which used the methodology set forth in the *City Environmental Quality Review (CEQR) Technical Manual*, identified, for peak hours and locations where adverse effects were predicted, threshold volume increases that could result in an adverse effect specific to each stair or escalator.[49] If, in addition to exceedance of such volume thresholds, overall station ridership in the 30 days prior to the start of tolling (December 2024) had returned to at least 90 percent of volumes in the same month of 2019, then mitigation measures would need to be installed as soon as practicable; if ridership in December 2024 was not at or above 90 percent of ridership in the same month of 2019, then design and planning would need to begin, and the mitigation should be implemented before ridership reaches 90 percent. **Table 7-5** summarizes results from monitoring at these locations.[50]

[49] The *Technical Manual* is available from the New York City Mayor's Office of Environmental Coordination web site at https://www.nyc.gov/site/oec/environmental-quality-review/technical-manual.page.
[50] WSP (September and October 2025), Pre- and Post-Go Live Station Element Analysis.

Table 7-5: Monitoring Results for Transit Station Stairs/Escalators

Transit Station	Stair or Escalator Monitored	AM Change in Weekday Peak-Hour Passenger Volumes Since Tolling Began	PM Change in Weekday Peak-Hour Passenger Volumes Since Tolling Began	Increase in Weekday Peak-Hour Passengers Threshold for Mitigation	Total Station Ridership, Nov. 2024 as a Pct. of Nov. 2019
Times Sq-42 St/42 St-Port Authority Bus Terminal	Stair ML6/ML8	+184	-66	+92	67.3%
Flushing-Main St	Escalator E456	-14	+43	+26	79.9%
14 Street-Union Square	Escalator E219	+204	-17	+21	67.6%
Court Square	Stair P2/P4	-62	-142	+101	82.2%
PATH Hoboken Station	Stair 01/02	-59	-48	+205	59.4%

Source: WSP (September and October 2025), Pre- and Post-Go Live Station Element Analysis.

Since both AM peak hour and PM peak hour volumes decreased at the stairs studied at Court Square and PATH Hoboken Station, no mitigation is needed. At Times Sq-42 St/42 St-Port Authority Bus Terminal, Flushing-Main St, and 14 Street-Union Square, passenger volumes on the stairs or escalators studied exceeded either the AM or PM peak-hour threshold for mitigation, but in some cases during different time periods than the peak hour identified in the Final EA as having a potential adverse effect, and for which the volume threshold was identified.

To determine whether the changes constituted an adverse effect, passenger volumes on the stairs and escalators at these three stations were also analyzed using the methodology outlined in the *CEQR Technical Manual*. This approach compares pre-tolling and post-tolling volumes against CEQR-defined criteria to identify significant impacts. As shown in **Table 7-6**, only escalator E219 at 14 Street-Union Square meets the threshold for an adverse effect under the CEQR methodology.

Table 7-6: Additional CEQR Analysis for a Stair and Escalators in Three NYCT Stations where Passenger Volumes Exceeded Thresholds During One Peak-Hour

Transit Station	Stair or Escalator Monitored	AM Pre V/C	AM Post V/C	AM Post LOS	PM Pre V/C	PM Post V/C	PM Post LOS	CEQR Impact?	Mitigation Implemented?
Flushing-Main St	Escalator E456	0.71	0.71	C	0.29	0.31	A	No	None needed
Times Sq-42 St/42 St-Port Authority Bus Terminal	Stair ML6/ML8	0.97	1.05	D	1.34	1.31	D	No	None needed
14 Street-Union Square	Escalator E219	1.47	1.57	E	0.72	0.42	A	Yes; AM Peak Hour	Yes

Note: Stair 01/02 at PATH Hoboken Station and Stair P2/P4 at Court Square are not included since both AM and PM peak hour passenger volumes decreased.
Source: WSP (September and October 2025), Pre- and Post-Go Live Station Element Analysis; TBTA.

The mitigation identified in the Final EA for Escalator E219 is to increase the speed of the escalator from 100 feet per minute to 120 feet per minute (fpm) so that it can carry more people. Overall, December 2024 ridership at 14 Street-Union Square did not reach 90 percent of 2019 volumes, NYCT increased Escalator E219's speed to 120 fpm on November 18, 2025. No further mitigation is needed for this escalator or the other stairs and escalators studied.

Pedestrian circulation at crosswalks and sidewalks near Herald Square/Penn Station

Modeling for CRZ tolling's Final EA predicted that due to an increase in passenger volumes at nearby transit stations after the start of tolling, the number of pedestrians at one sidewalk location and two crosswalk locations near Manhattan's Herald Square and Penn Station could increase and cause an adverse effect, as determined based on guidance in the *CEQR Technical Manual*. Though modeling for Reevaluation 1 found no potential effects at these locations, the Project Sponsors committed to monitoring them and, if an adverse effect were to be found, NYC DOT would physically widen the sidewalk and crosswalks, or remove/relocate physical obstructions to increase space for the increased number of pedestrians as an enhancement.

To capture a pre-tolling baseline, pedestrians were counted at the three locations in December 2024, which was within six months of the start of tolling, as committed to in the Final EA and FONSI. Since weather influences pedestrian volumes, and because there is insufficient data to calculate seasonal adjustment factors, counts were taken again in December 2025. At the time of writing, data are being processed and analyzed to determine whether adverse effects have occurred that require mitigation from NYC DOT. Results will be shared after completing the analysis of the pre- and post-tolling conditions.

Three Highway Corridors

Modeling for the Final EA found that though CRZ tolling would provide benefits on highways used to access the CRZ, potential adverse traffic effects, in the form of increased delays or queuing, could occur on three highway corridors in either the single hour with the highest traffic volume in the AM peak period (6 a.m. to 10 a.m.), the midday (MD) period (10 a.m. to 4 p.m.), or the PM peak period (4 p.m. to 8 p.m.). Those three highway corridors were:

6. The westbound (WB) Long Island Expressway (I-495) (LIE) near the Queens Midtown Tunnel.
7. Approaches to the WB George Washington Bridge on I-95.
8. The northbound (NB) and southbound (SB) FDR Drive between 10 St and the Brooklyn Bridge.

Later analysis in Reevaluation 1 for Phase 3 of the toll schedule adopted in November 2024 (with a $15 peak auto E-ZPass toll) found potential adverse traffic effects on the same corridors, though the potential effects were smaller, and the period of the day in which they could occur changed on one highway segment. **Table 7-7** summarizes the Reevaluation 1 findings in terms of the time of day when a potential adverse effect was predicted and the intensity of that effect.[51]

Table 7-7: Effects of CRZ Tolling on Highway Segments with Potential Adverse Effects Found in Reevaluation 1, Phase 3 of the Adopted Toll Structure

Highway Segments	Time of Potential Adverse Effects	Intensity of Effect
WB Long Island Expwy (I-495) near Queens Midtown Tunnel	AM Peak Hour	Delay of 4 minutes in the AM, comparable to the 4 minutes of delay in the midday in the Final EA; volume increase of 8.5% in the AM is less than the 15% in the midday in the Final EA
Approaches to WB George Washington Bridge on I-95	MD Peak Hour	Incremental volume for the adopted toll structure (702 vehicles per hour [vph]) is lower than in the Final EA (826 vph)
NB and SB FDR Drive btw E. 10th St and Brooklyn Br	PM Peak Hour	Incremental volume for the adopted toll structure (413 vph) is at the lower end of the range predicted in the Final EA across the seven tolling scenarios studied (404 vph – 666 vph)

Source: FHWA, CBD Tolling Program Reevaluation 1 (June 2024).

TBTA and NYSDOT committed to monitoring traffic volumes with before and after traffic counts (where available), changes in speeds, and changes in delay at these locations. TBTA and NYSDOT agreed that if, in the peak hours of the day when traffic is greatest, traffic volumes increase by more than five percent and if delays increase by 2.5 minutes or more, then appropriate transportation demand management (TDM) measures (such as ramp metering, motorist information, signage, signal timing changes, and/or targeted toll policy modifications to reduce diversions) would be implemented.

Monitoring traffic volume changes relied on average daily traffic counts from one location in each of the three corridors. **Table 7-8** describes the count locations for which before and after weekday traffic

[51] FHWA (June 2024), CBD Tolling Program Reevaluation 1, p. 34, https://www.mta.info/document/142711.

counts were available, before tolling and approximately three months after tolling began, as committed to in the Final EA.

At the site on the LIE, counts from the last week of April were available; counts on I-95/Trans-Manhattan Expressway westbound to the George Washington Bridge and on the FDR Drive were available in both mid-March and the last week of April since these two sites are also part of the traffic monitoring component of TBTA, NYC DOT, and NYSDOT's commitment to monitoring air quality.[52] An additional number of weekdays of data were available for the FDR Drive in October 2024 from a larger effort to collect year-over-year data on traffic counts within and immediately outside the CRZ.

Table 7-8: Traffic Count Locations for Highway Monitoring

Highway Segments for Analysis	Traffic Count Location
Westbound Long Island Expwy (I-495) near Queens Midtown Tunnel	LIE / I-495 west of the interchange with the Brooklyn Queens Expwy
Approaches to westbound George Washington Br on I-95	I-95 / Trans-Manhattan Expwy btw. Audubon Ave and Saint Nicholas Ave
Northbound and southbound FDR Drive between E. 10 St and Brooklyn Br	FDR Dr at Jackson St

Hourly speed and travel time data for the three corridors came from StreetLight Data, Inc., as specified in the Final EA.

Analysis of the traffic volume, speed, and travel time data followed standard practice and procedures by NYSDOT's Highway Data Services Bureau and the guidelines of NYSDOT *Highway Design Manual*, Chapter 5, Section 5.2. Using the traffic count data, peak hour volumes before and after tolling were calculated in the direction of travel where potential adverse effects were predicted. October counts were compared to both the March and April counts taken on the FDR Drive and I-95 / Trans-Manhattan Expressway, and counts taken on the LIE in October were compared to counts taken in March. Though modeling in Reevaluation 1 found potential adverse effects in either the AM, MD, or PM peak hours, but not all of them at any given location, traffic volume analysis considered the volumes in the peak hour of all three time periods. Average peak-hour travel times from the six months before tolling began were compared to the average hourly travel times for the three months after tolling began to see if delay increased by more than 2.5 minutes (or 150 seconds).

In some cases, the peak hour of the AM Peak, MD, or PM Peak period in March or April 2025 was different from the peak hour in October 2024. For example, on the northbound FDR Drive between E 10 St and Brooklyn Bridge, the AM Peak hour with the largest vehicle volume in October 2024 was from 6 a.m. to 7 a.m. However, in both March and April of 2025, the peak hour was from 7 a.m. to 8 a.m. In these cases, the travel time from before tolling during the 6 a.m. to 7 a.m. hour was compared to the travel time after tolling

[52] More information is available in the "Air Quality" chapter.

during both the 6 a.m. to 7 a.m. hour and 7 a.m. to 8 a.m. hour; in both cases, travel times did not increase above the 2.5-minute threshold.

None of the three highway segments saw travel times increase by more than 2.5 minutes in the peak hours or at any time of the day. The FDR Drive was the only corridor where peak-hour traffic volumes increased by more than five percent in any peak hour. **Table 7-9** through **Table 7-12** summarize both the traffic volume and travel time findings.[53,54] **Table 7-12** presents travel times for six road segments affecting westbound traffic on the George Washington Bridge (I-95). These travel times are measured separately for the lower and upper-level bridge approaches.

Though the monitoring commitment in the Final EA was to study hourly speeds from StreetLight Data, Inc., it is possible that average hourly travel times will mask travel times experienced in shorter periods. So, as an additional check, average speeds and travel times from TRANSCOM were analyzed to ensure that no spike in travel times over the 2.5-minute threshold occurred within one-hour spans of time where the change in average travel time did not exceed 2.5 minutes.[55] Comparing the 15-minute-increment average travel times over the six months before tolling began to the three months after tolling began again found no changes that exceeded the 2.5-minute threshold. Based on these findings, no TDM measures or other mitigation are needed.

[53] NYSDOT, Traffic Data Viewer Multi-Day Volume Reports, Accessed August 2025 from https://nysdottrafficdata.drakewell.com/publicmultinodemap.asp; NYC DOT and Traffic Databank, Traffic Short Counts.
[54] StreetLight Data, Inc., Network Performance, StreetLight Insight, Accessed August through October 2025 from https://insight.streetlightdata.com.
[55] NYSDOT analysis of TRANSCOM Travel Time Comparison data (April 2025).

Table 7-9: Northbound FDR Drive between E. 10 St and Brooklyn Bridge, Peak Hour Volume and Travel Time Analysis

Peak Hour Traffic Volume

Metrics	AM Period Oct 2024 6 - 7 a.m.	AM Period Mar 2025 7 - 8 a.m.	AM Period Apr 2025 7 - 8 a.m.	MD Period Oct 2024 2 - 3 p.m.	MD Period Mar 2025 2 - 3 p.m.	MD Period Apr 2025 3 - 4 p.m.	PM Period Oct 2024 5 - 6 p.m.	PM Period Mar 2025 5 - 6 p.m.	PM Period Apr 2025 5 - 6 p.m.
Volume (vph)	3,661	3,790	3,871	3,567	3,694	3,610	3,229	3,625	3,495
Change from Before Tolling	-	+129 (+3.5%)	+210 (+5.7%)	-	+127 (+3.6%)	+43 (+1.2%)	-	+396 (+12.3%)	+266 (+8.2%)
Increase in Volume > 5%?	-	No	Yes	-	No	No	-	Yes	Yes

Sources: NYC DOT and Traffic Databank Traffic Short Counts; NYSDOT, Traffic Data Viewer Multi-Day Volume Reports.

Peak Hour Travel Time

Metrics	AM Period Before Tolling 6 – 7 a.m.	AM Period After Tolling 6 – 7 a.m.	AM Period After Tolling 7 – 8 a.m.	MD Period Before Tolling 2 – 3 p.m.	MD Period After Tolling 2 – 3 p.m.	MD Period After Tolling 3 – 4 p.m.	PM Period Before Tolling 5 - 6 p.m.	PM Period After Tolling 5 -6 p.m.
Travel Time (Seconds)	152	159	208	173	172	170	170	179
Change from Before Tolling (Seconds)	-	+7	+56	-	-1	-3	-	+9
Increase of 2.5 Min. or More?	-	No	No	-	No	No	-	No

Source: StreetLight Data, Inc., StreetLight Insight Network Performance.

Table 7-10: Southbound FDR Drive between E. 10th St and Brooklyn Bridge, Peak Hour Volume and Travel Time Analysis

Peak Hour Traffic Volume

Metrics	AM Period Oct 2024 8 - 9 a.m.	AM Period Mar 2025 8 - 9 a.m.	AM Period Apr 2025 8 - 9 a.m.	MD Period Oct 2024 3 - 4 p.m.	MD Period Mar 2025 3 - 4 p.m.	MD Period Apr 2025 3 - 4 p.m.	PM Period Oct 2024 5 - 6 p.m.	PM Period Mar 2025 6 - 7 p.m.	PM Period Apr 2025 7 - 8 p.m.
Volume (vph)	3,767	3,963	4,148	3,843	4,018	4,078	3,719	3,932	3,968
Change from Before Tolling	-	+196 (+5.2%)	+381 (+10.1%)	-	+175 (+4.6%)	+235 (+6.1%)	-	+213 (+5.7%)	+249 (+6.7%)
Increase in Volume > 5%?	-	Yes	Yes	-	No	Yes	-	Yes	Yes

Sources: NYC DOT and Traffic Databank Traffic Short Counts; NYSDOT, Traffic Data Viewer Multi-Day Volume Reports.

Peak Hour Travel Time

Metrics	AM Period Before Tolling 8 - 9 a.m.	AM Period After Tolling 8 - 9 a.m.	MD Period Before Tolling 3 - 4 p.m.	MD Period After Tolling 3 - 4 p.m.	PM Period Before Tolling 5 – 6 p.m.	PM Period After Tolling 5 – 6 p.m.	PM Period After Tolling 6 -7 p.m.	PM Period After Tolling 7 – 8 p.m.
Travel Time (Seconds)	145	147	164	169	187	229	179	160
Change from Before Tolling (Seconds)	-	+2	-	+5	-	+42	-8	-27
Increase of 2.5 Min. or More?	-	No	-	No	-	No	No	No

Source: StreetLight Data, Inc., StreetLight Insight Network Performance.

Table 7-11: Westbound LIE (I-495) near Queens Midtown Tunnel, Peak Hour Volume and Travel Time Analysis

Peak Hour Traffic Volume

Metrics	AM Period Oct 2024 7-8 a.m.	AM Period Apr 2025 7-8 a.m.	MD Period Oct 2024 2-3 p.m.	MD Period Apr 2025 2-3 p.m.	PM Period Oct 2024 6-7 p.m.	PM Period Apr 2025 6-7 p.m.
Volume (vph)	4,308	4,164	3,341	3,389	3,110	3,260
Change from Before Tolling	-	-144	-	+48	-	+150
Increase in Volume > 5%?	-	No	-	No	-	No

Sources: NYSDOT, Traffic Data Viewer Multi-Day Volume Reports.

Peak Hour Travel Time

Metrics	AM Period Before Tolling 7-8 a.m.	AM Period After Tolling 7-8 a.m.	MD Period Before Tolling 2-3 p.m.	MD Period After Tolling 2-3 p.m.	PM Period Before Tolling 6-7 p.m.	PM Period After Tolling 6-7 p.m.
Travel Time (Seconds)	99	86	141	93	121	85
Change from Before Tolling (Seconds)	-	-13	-	-48	-	-36
Increase of 2.5 Min. or More?	-	No	-	No	-	No

Source: StreetLight Data, Inc., StreetLight Insight Network Performance.

Table 7-12: Approaches to Westbound George Washington Bridge on I-95, Peak Hour Volume and Travel Time Analysis

Peak Hour Traffic Volume, I-95 / Trans-Manhattan Expressway

Metrics	AM Period Oct 2024 6-7 a.m.	AM Period Mar 2025 6-7 a.m.	AM Period Apr 2025 6-7 a.m.	MD Period Oct 2024 3-4 p.m.	MD Period Mar 2025 10-11 a.m.	MD Period Apr 2025 10-11 a.m.	PM Period Oct 2024 7-8 p.m.	PM Period Mar 2025 6-7 p.m.	PM Period Apr 2025 6-7 p.m.
Volume (vph)	7,398	7,477	7,224	6,766	6,554	6,437	5,805	5,994	6,092
Change from Before Tolling	-	+79 (+1.1%)	-174 (-2.4%)	-	-212 (-3.1%)	-329 (-4.9%)	-	+189 (+3.3%)	+287 (+4.9%)
Increase in Volume > 5%?	-	No	No	-	No	No	-	No	No

Source: NYSDOT, Traffic Data Viewer Multi-Day Volume Reports.

Peak Hour Travel Time, Approaches to Upper-Level Westbound George Washington Bridge on I-95

Location	Metrics	AM Period Before Tolling 6-7 a.m.	AM Period After Tolling 6-7 a.m.	MD Period Before Tolling 3-4 p.m.	MD Period After Tolling 3-4 p.m.	MD Period After Tolling 10-11 a.m.	PM Period Before Tolling 7-8 p.m.	PM Period After Tolling 7-8 p.m.	PM Period After Tolling 6-7 p.m.
WB Cross Bronx Expwy	Travel Time (Seconds)	148	151	223	226	204	226	211	252
WB Cross Bronx Expwy	Change from Before Tolling (Seconds)	-	+3	-	+3	-19	-	-15	+26
WB Cross Bronx Expwy	Increase of 2.5 Min. or More?	-	No	-	No	No	-	No	No
NB Harlem River Dr	Travel Time (Seconds)	144	147	214	215	195	213	201	231
NB Harlem River Dr	Change from Before Tolling (Seconds)	-	+3	-	+1	-19	-	-12	+18
NB Harlem River Dr	Increase of 2.5 Min. or More?	-	No	-	No	No	-	No	No
NB Henry Hudson Pkwy	Travel Time (Seconds)	111	114	158	153	134	156	145	161
NB Henry Hudson Pkwy	Change from Before Tolling (Seconds)	-	+3	-	-5	-24	-	-11	+5
NB Henry Hudson Pkwy	Increase of 2.5 Min. or More?	-	No	-	No	No	-	No	No
SB Henry Hudson Pkwy	Travel Time (Seconds)	129	133	179	176	158	177	165	185
SB Henry Hudson Pkwy	Change from Before Tolling (Seconds)	-	+4	-	-3	-21	-	-12	+8
SB Henry Hudson Pkwy	Increase of 2.5 Min. or More?	-	No	-	No	No	-	No	No
NB Major Deegan Expwy	Travel Time (Seconds)	183	186	282	293	232	270	249	316
NB Major Deegan Expwy	Change from Before Tolling (Seconds)	-	+3	-	+11	-50	-	-21	+46
NB Major Deegan Expwy	Increase of 2.5 Min. or More?	-	No	-	No	No	-	No	No
SB Major Deegan Expwy	Travel Time (Seconds)	175	179	248	250	229	254	239	278
SB Major Deegan Expwy	Change from Before Tolling (Seconds)	-	+4	-	+2	-19	-	-15	+24
SB Major Deegan Expwy	Increase of 2.5 Min. or More?	-	No	-	No	No	-	No	No

Source: StreetLight Data, Inc., StreetLight Insight Network Performance.

Peak Hour Travel Time, Approaches to Lower-Level Westbound George Washington Bridge on I-95

Location	Metrics	AM Period Before Tolling 6-7 a.m.	AM Period After Tolling 6-7 a.m.	MD Period Before Tolling 3-4 p.m.	MD Period After Tolling 3-4 p.m.	MD Period After Tolling 10-11 a.m.	PM Period Before Tolling 7-8 p.m.	PM Period After Tolling 7-8 p.m.	PM Period After Tolling 6-7 p.m.
WB Cross Bronx Expwy	Travel Time (Seconds)	151	153	220	222	201	228	213	252
WB Cross Bronx Expwy	Change from Before Tolling (Seconds)	-	+2	-	+2	-19	-	-15	+24
WB Cross Bronx Expwy	Increase of 2.5 Min. or More?	-	No	-	No	No	-	No	No
NB Harlem River Dr	Travel Time (Seconds)	147	149	205	204	189	211	200	227
NB Harlem River Dr	Change from Before Tolling (Seconds)	-	+2	-	-1	-16	-	-11	+16
NB Harlem River Dr	Increase of 2.5 Min. or More?	-	No	-	No	No	-	No	No
NB Henry Hudson Pkwy	Travel Time (Seconds)	105	108	147	144	128	147	138	152
NB Henry Hudson Pkwy	Change from Before Tolling (Seconds)	-	+3	-	-3	-19	-	-9	+5
NB Henry Hudson Pkwy	Increase of 2.5 Min. or More?	-	No	-	No	No	-	No	No
SB Henry Hudson Pkwy	Travel Time (Seconds)	122	126	168	164	147	167	156	174
SB Henry Hudson Pkwy	Change from Before Tolling (Seconds)	-	+4	-	-4	-21	-	-11	+7
SB Henry Hudson Pkwy	Increase of 2.5 Min. or More?	-	No	-	No	No	-	No	No
NB Major Deegan Expwy	Travel Time (Seconds)	184	186	273	278	225	268	248	308
NB Major Deegan Expwy	Change from Before Tolling (Seconds)	-	+2	-	+5	-48	-	-20	+40
NB Major Deegan Expwy	Increase of 2.5 Min. or More?	-	No	-	No	No	-	No	No
SB Major Deegan Expwy	Travel Time (Seconds)	177	180	242	242	223	253	238	275
SB Major Deegan Expwy	Change from Before Tolling (Seconds)	-	+3	-	0	-19	-	-15	+22
SB Major Deegan Expwy	Increase of 2.5 Min. or More?	-	No	-	No	No	-	No	No

Source: StreetLight Data, Inc., StreetLight Insight Network Performance.

Four Intersections

Modeling in the Final EA found that CRZ tolling would reduce traffic volumes and improve traffic flow, in general, within and around the CRZ. However, because traffic patterns would change with tolling, traffic volumes at specific intersections could change, and could cause or increase delays for vehicles travelling through those intersections. The Project Sponsors considered conditions at 102 intersections in the Final EA and determined that tolling could increase traffic enough that an adverse effect could occur at four Manhattan intersections at certain times of day.

Later analysis in Reevaluation 1 for Phase 3 of the toll schedule adopted in November 2024 (with a $15 peak auto E-ZPass toll) found that only one of these intersections would still have a potential adverse effect, but the Project Sponsors committed to monitoring all four intersections and implementing any needed mitigation as an enhancement. **Table 7-13**, below, summarizes results from Final EA and Reevaluation 1 modeling.[56]

Table 7-13: Intersections with Potential Adverse Effects Identified in the CRZ Tolling Final EA and Reevaluation 1

Intersection	Potential Adverse Effects, Final EA	Potential Adverse Effects, Reevaluation 1
Trinity Pl and Edgar St, Manhattan	Yes, MD Period peak hour	No
East 36th St and Second Ave, Manhattan	Yes, MD Period peak hour	No
East 37th St and Third Ave, Manhattan	Yes, Late Night Period peak hour	No
East 125th St and Second Ave, Manhattan	Yes, peak hours of the AM Peak and PM Peak periods	Yes, peak hour of PM Peak period

Notes: Here, the peak hour of the AM Peak period is 8:00 a.m. to 9:00 a.m., the peak hour of the MD period is 1:00 p.m. to 2:00 p.m., the peak hour of the PM Peak period is 5:00 p.m. to 6:00 p.m., and the peak hour of the Late Night period is 9:00 p.m. to 10:00 p.m.
Source: FHWA (June 2024), CBD Tolling Program Reevaluation 1.

To monitor for adverse effects, traffic counts were taken at each intersection before tolling began from November 20 through December 4, 2024, and traffic counts were taken after tolling began from May 3 through May 17, 2025.[57] These two sets of counts were then entered into a traffic-simulation model with information about the number of lanes and signal timing at each intersection to calculate the time it takes for vehicles to pass through the intersection from all directions, both before and after tolling.

For each intersection to be considered for mitigation or enhancement, two conditions needed to be true for the traffic-simulation model's results: 1) the intersection must operate at level of service (LOS) E or F,

[56] FHWA (June 2024), Table 4B.2, Effects on Location Intersections Final EA and Adopted Toll Structure, CBD Tolling Program Reevaluation 1, p. 36, https://www.mta.info/document/142711.
[57] Pre-go live data collected from November 20 through December 4, 2024 and post-go live data collected from May 3 through May 17, 2025. To avoid any holiday effects on traffic, data from November 24, 2024 through November 30, 2024 (the week of Thanksgiving) were not used.

and 2) average vehicle delay after tolling began must be at least five seconds longer than before tolling began. These criteria match those used in the Final EA and Reevaluation 1 to identify potential adverse effects.

Table 7-14 summarizes results from monitoring at these locations.[58] All intersections were studied in the AM and PM Peak periods, as well as MD. However, only the intersection of East 37th St and Third Av was studied in the Late Night period, as it was the only intersection with potential adverse effects during that span of the day.

[58] WSP (October 2025), Intersection Monitoring Analysis.

Table 7-14: Results of Modeling at the Four Intersections with Potential Adverse Effects Identified in the CRZ Tolling Final EA and Reevaluation 1

Intersection Name	Time Period	LOS Before Tolling	LOS After Tolling	Change in Delay (sec.)	Mitigation or Enhancement Needed?
Trinity Pl and Edgar St, Manhattan	AM Peak	B	B	-0.8	No
Trinity Pl and Edgar St, Manhattan	MD	C	C	+0.1	No
Trinity Pl and Edgar St, Manhattan	PM Peak	B	B	+1.2	No
Trinity Pl and Edgar St, Manhattan	Late Night	N/A	N/A	N/A	N/A
East 37th St and Third Ave, Manhattan	AM Peak	C	C	+6.1	No
East 37th St and Third Ave, Manhattan	MD	C	C	+1.3	No
East 37th St and Third Ave, Manhattan	PM Peak	C	C	+2.0	No
East 37th St and Third Ave, Manhattan	Late Night	C	C	+0.6	No
East 36th St and Second Ave, Manhattan	AM Peak	D	E	+22.4	Yes
East 36th St and Second Ave, Manhattan	MD	C	E	+28.9	Yes
East 36th St and Second Ave, Manhattan	PM Peak	C	C	+1.0	No
East 36th St and Second Ave, Manhattan	Late Night	N/A	N/A	N/A	N/A
East 125th St and Second Ave, Manhattan	AM Peak	D	D	+2.7	No
East 125th St and Second Ave, Manhattan	MD	D	D	+8.3	No
East 125th St and Second Ave, Manhattan	PM Peak	D	D	+3.1	No
East 125th St and Second Ave, Manhattan	Late Night	N/A	N/A	N/A	N/A

Source: WSP (October 2025), Intersection Monitoring Analysis.

Based on the metrics for determining the need for traffic mitigation measures defined in the CRZ tolling Final EA, one of the four study locations, East 36th Street and Second Avenue, required signal enhancements. Based on the analysis findings, NYC DOT shifted the signal timing at E 36th Street and Second Avenue; three seconds were shifted from the shared southbound left and through phase to the eastbound/westbound phase in both the AM Peak and MD time periods. Modeling indicated that these changes would improve both the AM Peak and MD LOS from E to D. The change in delay would also drop so that in the AM Peak, the after-tolling delay would be only 10.2 seconds longer than the pre-tolling delay,

and in the MD period, the after-tolling delay would be 13.2 seconds longer than the pre-tolling delay. NYC DOT applied these signal timing enhancements on August 20, 2025.

No further mitigation or enhancement is needed.

Truck Industry Monitoring

The Project Sponsors are monitoring truck speeds and traffic flows, truck crashes, and tonnage and commodity flows. Vehicle speeds and traffic flows are addressed in the "Traffic and Congestion" chapter. Tonnage and commodity flows will be available at a later date when these data become available.

For the period from January 5, 2025 through October of 2025, there were 110 crashes involving trucks in the CRZ and on excluded roadways, according to motor vehicle collision data for crashes resulting in injuries or fatalities from NYPD.[59] This represents a 21 percent decrease over the same period in 2024, during which there were 140 crashes involving trucks. By comparison, crashes involving trucks were up nine percent from January 5 through October when comparing 2023 to 2024, with a total of 129 crashes involving trucks in the CRZ and on excluded roadways in 2023.

Conclusion

TBTA, NYC DOT, and NYSDOT are working together and with a variety of stakeholders to provide projects and programs that will benefit EJ-designated communities. In addition, the CRZ tolling Project Sponsors have met their commitments to monitor the potential adverse effects of CRZ tolling, even in locations where Reevaluation 1 found no potential adverse effects.

A reduced overnight toll, meant to discourage traffic diversions through communities around the CRZ, and the discount for low-income, frequent drivers to the CRZ are already in place; starting on January 5, 2025 drivers have been discouraged from driving on the FDR Drive with a toll on any vehicle traveling northbound on the FDR Drive that exits at East Houston Street and then travels southbound on the FDR Drive.

Replacement of TRUs at Hunts Point Market has begun, as have ongoing meetings with the EJCG and SBWG. Expansion of the NYC DOT Clean Trucks and Off-Hour Deliveries Programs will begin imminently. The implementation of electric truck-charging infrastructure, installation of roadside vegetation, renovation of parks and green spaces, additional asthma care for children in the Bronx, and installation of air filtration system upgrades in schools near highways are all in the planning phase, although much progress has been made toward identifying sites for implementation with relevant stakeholders.

The MTA is progressing on two enhancements of the MTA's bus service: prioritizing equity in bus network re-designs for Brooklyn and Manhattan, as well as prioritizing the Kingsbridge and Gun Hill Depots for the roll-out of zero-emission buses. TBTA has fulfilled its commitment to charge taxis and FHVs no more than

[59] NYPD, Motor Vehicle Collisions – Crashes, Accessed November 2025 from https://data.cityofnewyork.us/Public-Safety/Motor-Vehicle-Collisions-Crashes/h9gi-nx95/.

the once-daily toll rate for automobiles and to ensure that passengers, not the driver, pay that toll through the PTCP.

Monitoring for potential adverse effects from tolling is mostly complete. At one intersection, monitoring found one adverse effect and NYC DOT adjusted the traffic signal timing at that location (as prescribed in the Final EA) on August 20, 2025. At one NYCT escalator, monitoring also found an adverse effect, and NYCT increased the escalator's speed (also prescribed in the Final EA) on November 18, 2025. Though modeling found no adverse effect on air quality, the Project Sponsors are monitoring air quality in New York City and around the region, the details of which can be found in the "Air Quality" chapter. Pedestrian circulation monitoring at one sidewalk and two crosswalks in the Herald Square/Penn Station area will be complete in early 2026. Finally, no adverse effects were found on the three highway corridors monitored and so no TDM measures on those highways are needed.

Appendix: Detailed Traffic Data for Air Quality Monitoring

Air-quality monitoring for CRZ tolling includes additional NYC Department of Health pollutant data collection at six locations in EJ-designated communities near highways where modeling for the Final EA and later reevaluations predicted potential increases in traffic with the start of tolling, as well as at one control site. Since traffic is not the only source of the monitored pollutants, in addition, traffic counts are conducted along with air quality monitoring to analyze whether changes in air quality could be attributed to changes in vehicle traffic.

Traffic counts conducted by NYSDOT and NYC DOT on highways near the NYCCAS sites allow for traffic reporting and analysis in parallel to pollutant reporting and analysis.[60] **Figure A-1** describes the locations of these traffic count sites and the seven NYCCAS monitoring sites to which each traffic count site is paired.

At most sites, these vehicle counts consist of periodic short counts on weekdays, when equipment is placed on the highways to count vehicles for approximately 50 hours. However, in some months and at some locations, additional hours of data were collected. Short counts were taken at sites in Fall 2023, Spring 2024, Fall 2024, Winter 2025, Spring 2025, and Summer 2025. A pre-existing NYSDOT traffic count site along the Cross Bronx Expressway collects data at all times.

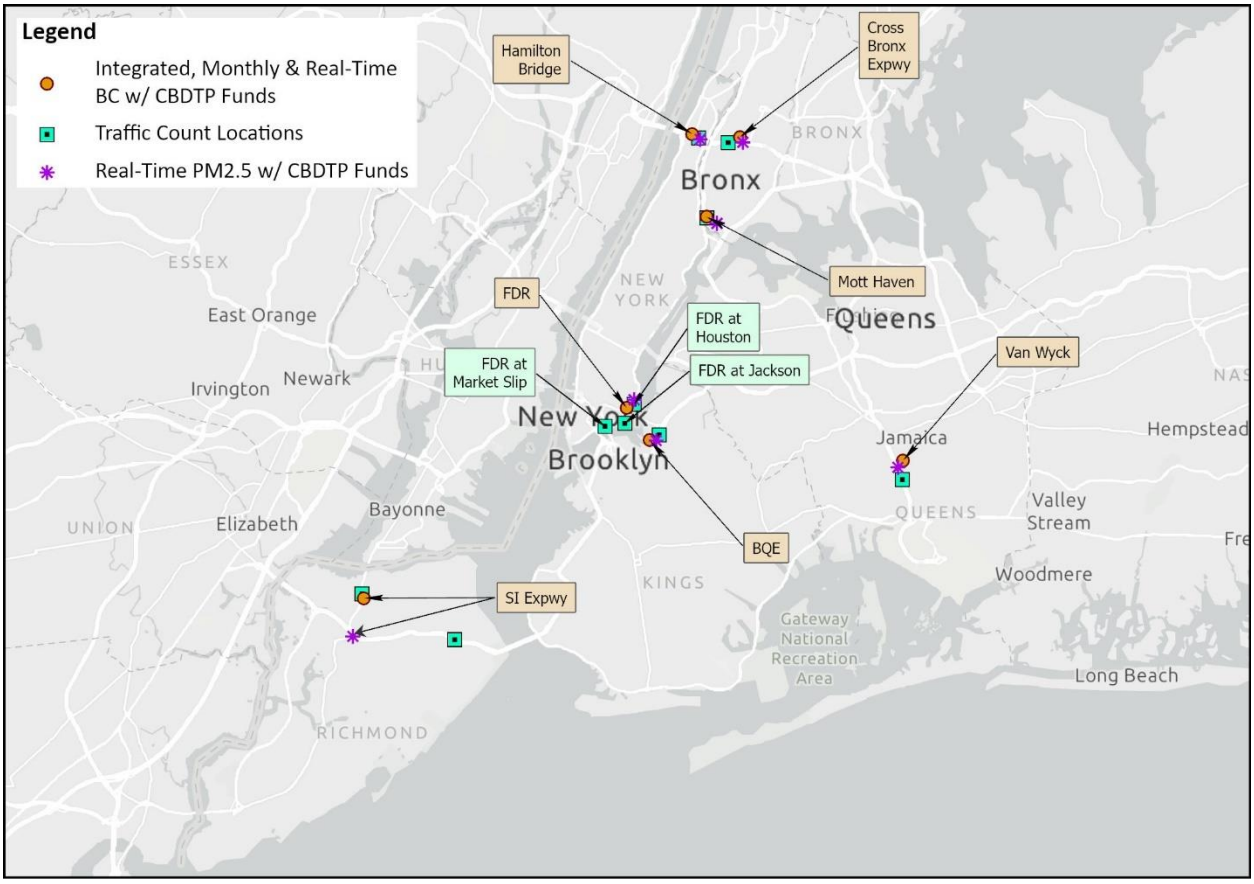
Each NYCCAS site is paired with one traffic count site, though the NYCCAS site on the FDR Drive is paired with three count sites. TBTA, NYSDOT, and NYC DOT included two additional traffic count sites along the FDR Drive to bolster air quality analysis in the Lower East Side and Lower Manhattan communities in response to community concerns. This appendix provides tables with average daily traffic (ADT) for each month when counts were taken. **Table A-1** describes all-vehicle ADT, including passenger vehicles, trucks, buses, and motorcycles, while **Table A-2** describes ADT for trucks of all sizes.

TBTA calculated ADT using methods from NYSDOT's Data Services. Only data collected between 6 a.m. on Mondays and 12 p.m. on Fridays were included to get workweek ADT, and counts taken on NYSDOT's count holidays (federal holidays and other days when traffic volumes are atypical, such as the Tuesday after Memorial Day) were excluded. ADT was calculated by averaging traffic volumes for each hour of the day on all days when data were collected in that month, with three exceptions: 1) data collected in the last week of April 2024 and 2025 were all averaged together, even if data came from the first or second day of May; 2) data collected in the last week of October 2024 were averaged together, including data collected on Friday, November 1; and 3) data collected over the last week of November 2024 (Thanksgiving week) were not used to avoid any holiday effects on traffic. Hourly averages were summed to get a 24-hour ADT.

[60] NYC DOT and Traffic Databank, Traffic Short Counts; NYSDOT, Traffic Data Viewer Multi-Day Volume Reports, https://nysdottrafficdata.drakewell.com/publicmultinodemap.asp.

Data that did not meet NYSDOT Data Services' standard quality-control methods were also excluded and removed; counts from hours where the number of vehicles was atypical and incident reports from the regional TRANSCOM system indicated that they were influenced by construction, crashes, or other disruptions were also removed. Data are unadjusted for seasonality.

Figure A-1: NYCCAS Monitoring Sites in EJ-Designated Communities and Accompanying Traffic Count Sites



Sources: NYC Health Department, NYSDOT, TBTA.

Table A-1: All-Vehicle Workweek ADT on Highways Near NYCCAS Monitoring Sites in EJ-Designated Neighborhoods

Traffic Count Site	Oct '23 (Fall)	Nov '23 (Fall)	Dec '23 (Fall)	Apr '24 (Spring)	May '24 (Spring)	Jun '24 (Spring)	Oct '24 (Fall)	Nov '24 (Fall)	Dec '24 (Fall)	Jan '25 (Winter)	Feb '25 (Winter)	Mar '25 (Winter)	Apr '25 (Spring)	May '25 (Spring)	Jun '25 (Spring)	Aug '25 (Summer)	Sep '25 (Summer)
Trans-Manhattan Expwy	215,903	-	-	-	-	242,288	231,835	-	-	220,554	228,596	237,617	233,998	-	245,218		233,972
Cross Bronx Expwy at Jerome Avenue	140,419	146,676	141,943	147,306	146,604	144,783	144,444	140,149	136,699	138,095	140,497	140,470	137,781	132,615	135,740	137,203	135,202
Major Deegan Expwy	-	127,637	-	-	137,480	-	131,560	-	-	120,966	128,180	131,687	134,842	127,741	-	130,326	128,216
The FDR Dr at Houston St	150,894	145,364	-	149,939	-	-	125,983	-	128,765	141,280	142,894	147,302	151,762	-	-	145,803	149,163
The FDR Dr at Jackson St	-	-	-	134,803	-	-	129,601	-	134,669	129,020	129,484	132,464	136,012	-	-	133,072	136,307
The FDR Dr at Market Slip	-	-	-	-	123,035	-	119,114	-	122,302	-	-	-	-	126,932	-	126,030	127,273
BQE at Lee Ave	-	142,844	-	-	146,809	-	150,198	-	-	141,160	141,757	142,833	144,401	139,539	-	140,775	142,890
I-278 Staten Island Expwy	184,689	-	-	-	187,750	-	185,176	-	-	178,621	181,648	187,814	192,574	187,525	-	194,029	189,431
NY440 - MLK Expwy	-	-	36,753	-	38,080	-	36,059	-	36,288	34,377	36,176	37,317	38,241	37,585	-	36,694	37,639
Van Wyck Expwy	-	-	-	-	158,758	-	159,341	-	-	138,676	154,290	148,870	158,947	158,491	-	148,292	149,307

Note: Data for each site are available through NYSDOT's Traffic Data Viewer under these station ids: Trans-Manhattan Expwy = MTA Site E; Cross Bronx Expwy at Jerome Avenue = 0191; Major Deegan Expwy = MTA Site C; The FDR Dr at Houston St = MTA Site B; The FDR Dr at Jackson St = MTA Site F; The FDR Dr at Market Slip = MTA Site A; BQE at Lee Ave = MTA Site D; I-278 Staten Island Expwy = MTA Site I; NY440 - MLK Expwy = MTA Site J; Van Wyck Expwy = MTA Site H.

Sources: NYC DOT and Traffic Databank, Traffic Short Counts; NYSDOT, Traffic Data Viewer Multi-Day Volume Reports; TBTA.

Table A-2: Truck Workweek ADT on Highways Near NYCCAS Monitoring Sites in EJ-Designated Neighborhoods

Traffic Count Site	Oct '23 (Fall)	Nov '23 (Fall)	Dec '23 (Fall)	Apr '24 (Spring)	May '24 (Spring)	Jun '24 (Spring)	Oct '24 (Fall)	Nov '24 (Fall)	Dec '24 (Fall)	Jan '25 (Winter)	Feb '25 (Winter)	Mar '25 (Winter)	Apr '25 (Spring)	May '25 (Spring)	Jun '25 (Spring)	Aug '25 (Summer)	Sep '25 (Summer)
Trans-Manhattan Expwy	30,032					32,124	30,942			29,109	29,563	30,807	32,356		31,425		30,999
Cross Bronx Expwy at Jerome Avenue	22,820	23,938	23,753	23,368	23,677	23,398	22,706	22,804	23,033	22,195	22,265	22,802	22,603	22,636	22,150	21,732	22,825
Major Deegan Expwy		10,635			11,251		10,442			10,061	10,162	10,240	10,873	10,212		10,353	10,550
The FDR Dr at Houston St*	524	403		484			376		125	317	292	426	562			433	609
The FDR Dr at Jackson St*				503			393		182	275	254	341	456			326	454
The FDR Dr at Market Slip*					258		277		312					157		263	301
BQE at Lee Ave		15,147			15,750		14,323			14,049	14,242	14,490	14,925	14,148		14,428	14,732
I-278 Staten Island Expwy	12,791				13,198		13,570			11,645	12,168	12,214	13,198	12,673		12,620	13,032
NY440 - MLK Expwy			2,326		2,619		2,154		1,975	2,695	2,116	2,336	2,292	2,313		2,287	2,369
Van Wyck Expwy					9,799		9,195			7,498	7,895	8,339	8,804	9,074		7,612	7,525

Note: Data for each site are available through the NYSDOT Traffic Data Viewer under these station ids: Trans-Manhattan Expwy = MTA Site E; Cross Bronx Expwy at Jerome Avenue = 0191; Major Deegan Expwy = MTA Site C; The FDR Dr at Houston St = MTA Site B; The FDR Dr at Jackson St = MTA Site F; The FDR Dr at Market Slip = MTA Site A; BQE at Lee Ave = MTA Site D; I-278 Staten Island Expwy = MTA Site I; NY440 - MLK Expwy = MTA Site J; Van Wyck Expwy = MTA Site H.

*Though not permitted on the FDR Drive, a small number of trucks do travel on the highway illegally and appear in these counts.

Sources: NYC DOT and Traffic Databank, Traffic Short Counts; NYSDOT, Traffic Data Viewer Multi-Day Volume Reports; TBTA.