



BQE Automated Weigh-in-Motion Enforcement

Industry Webinar

August 15, 2023



Agenda

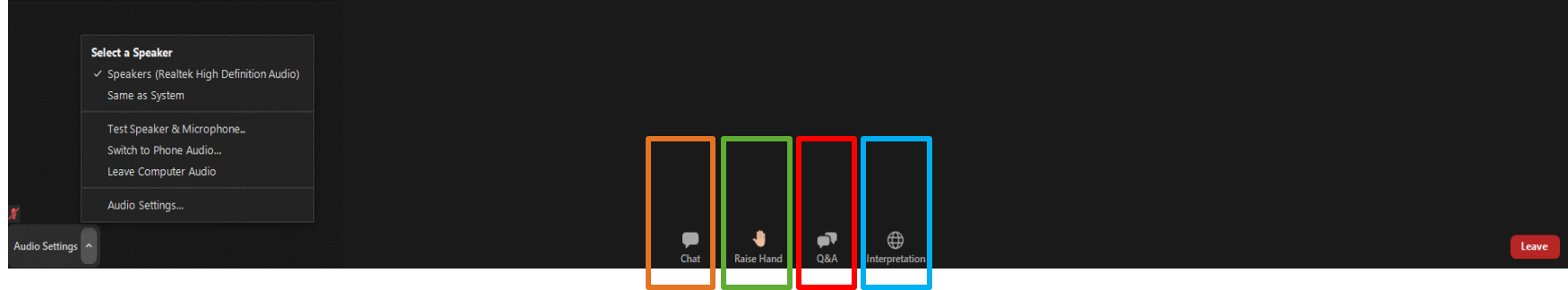
Today's Discussion

- Welcome
- Housekeeping
- BQE Weigh In Motion Program
- Question & Answers

Housekeeping

Zoom Logistics


Laptop/Desktop:



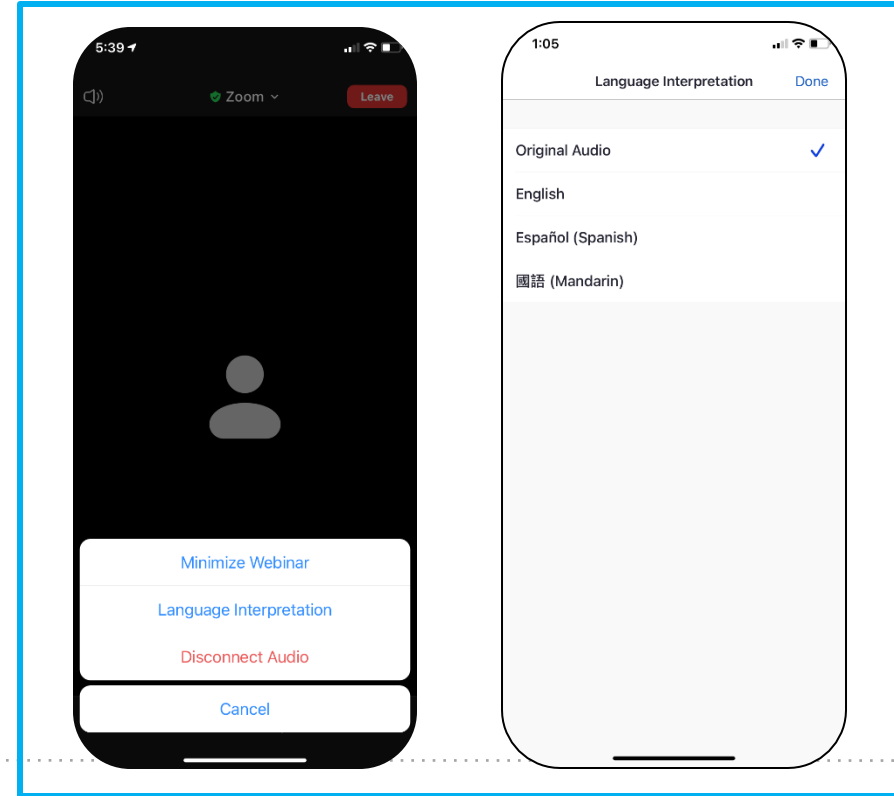
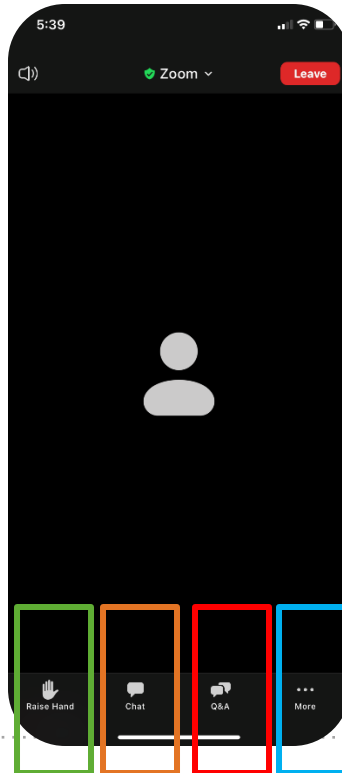
Mobile (Zoom App):

Landline:



 *6

 *9



Background

1

BQE History: Past, Present, & Future



- Robert Moses built the BQE beginning in 1944, intended to connect the Gowanus Parkway and RFK Bridge.
- The Triple Cantilever, a unified structure with two levels of traffic and Promenade
- Safe and being monitored, but beyond design life.



Key freight route: The BQE is one of the most heavily traveled roadways in New York City, and beyond, with an average daily volume of over 130,000 vehicles, including up to 13,000 trucks

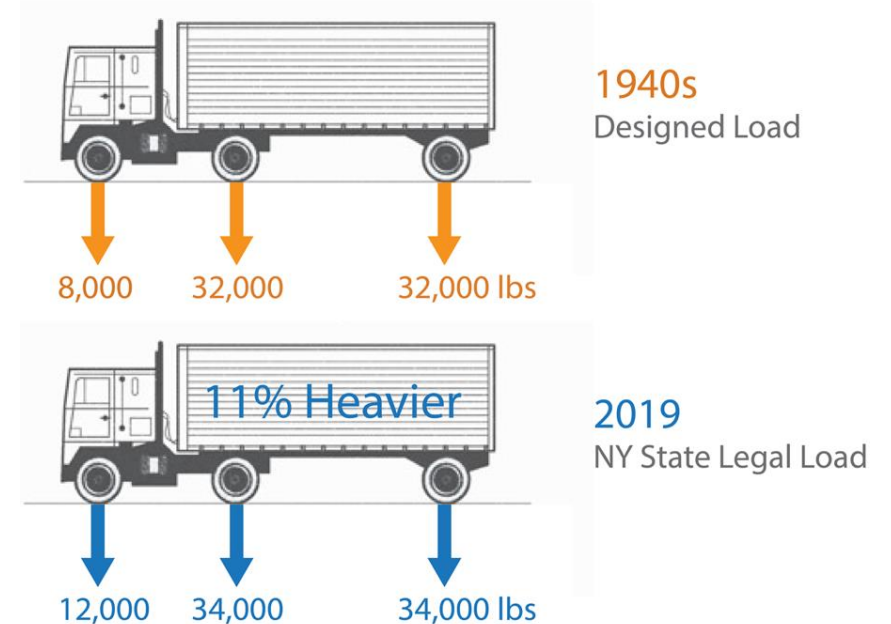
Rules and Regulations

- Truck Movement is governed by regulations at the federal, state and local level for vehicles permitted to operate within a jurisdiction by:
 - Size
 - Weight
 - Length
 - Height
 - Width
- Both the City and State issue oversize and overweight permits for the routing of overweight loads on roadways under their jurisdiction. NY State issues divisible loads permits, and, pursuant to State law, the City has grandfathered divisible overweight permits since the 1980s, of which there are a limited number in use today.



BQE Truck Weight Design & Legal Load

- As BQE Central approaches end of useful life, data collection & enforcement efforts provide for continued lifespan of structure
- NYS legal load is significantly higher than structure's designed load, and proliferation of overweight trucks continues
- Monitoring
 - Weigh-in-Motion sensors installed in October 2019 (in partnership with C2Smart). Data collected indicated:
 - QB – 15% of trucks were overweight
 - SIB – 12% of trucks were overweight



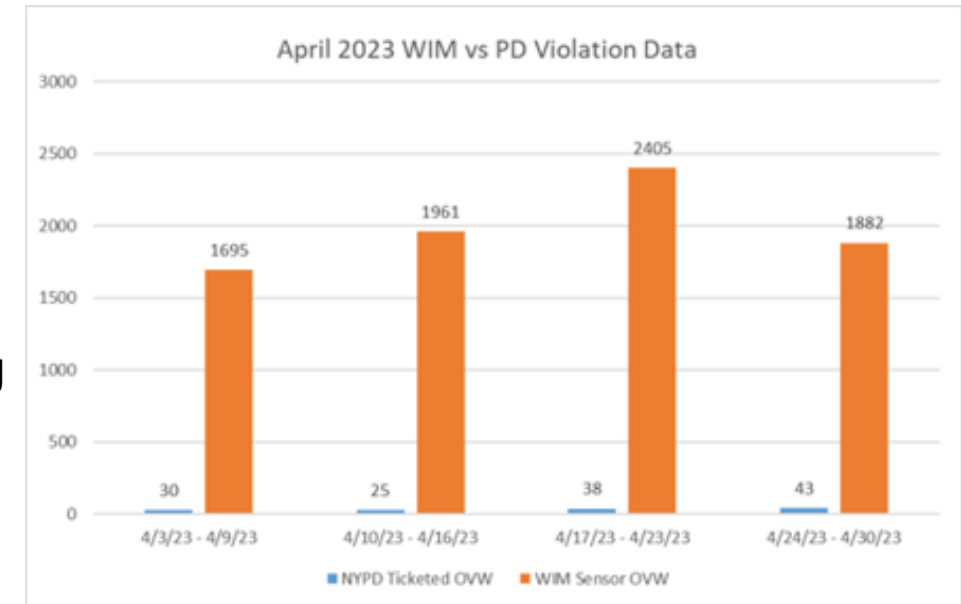
BQE Truck Weight Limits Enforcement-to-date

- **Enforcement:** Executive Order 51 issued in January 2020 to provide for strict enforcement of existing weight restrictions on BQE

- **Following the Executive order the following notification was sent to all permit holders**

"To all who currently have a valid NYC DOT Annual Overweight Load and or Annual Special Hauling / Crane permit, Vehicles with NYC DOT Annual Overweight Load and or Annual Special Hauling / Crane permits are NOT permitted to travel on the BQE / I-278 from Sands St. to Atlantic Avenue in both directions until further notice."

- New York City's highway network presents operational challenges to law enforcement personnel with limited available space to safely conduct truck stops.
- Leveraging enforcement and supporting technologies are essential to fostering a culture of compliance with NYC truck rules and regulations.



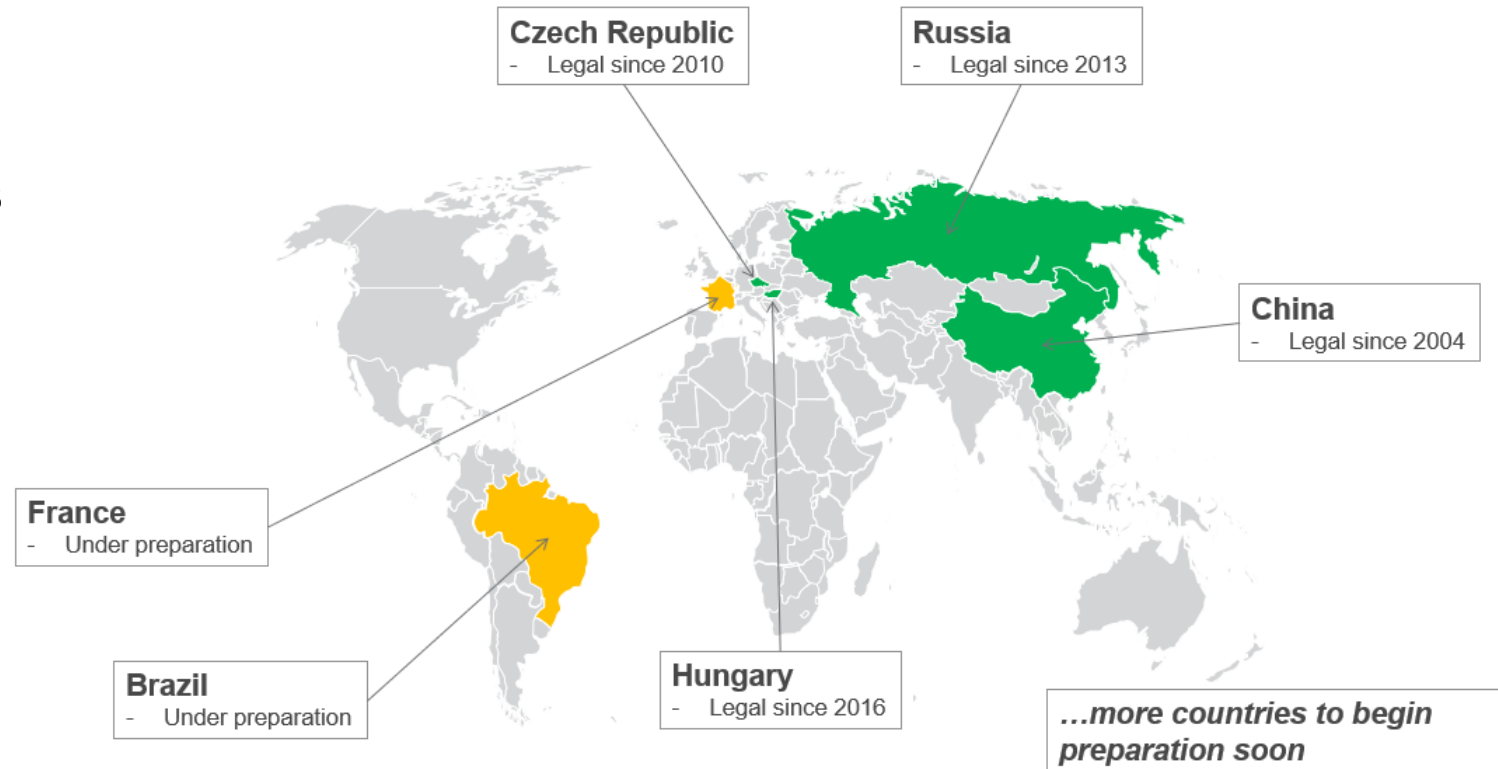
Only **14.6% of overweight trucks** identified along the BQE corridor by NYPD using portable scales

State of Technology / Legislation / Violations

2

Current State of Direct Enforcement – the Need Across the US

- **WIM sensors and/or systems** used in several states for screening and countries working toward Direct Enforcement
- Vehicle WIM for weight enforcement has been proven at high and low speeds for 20+ years
- Automated weight enforcement benefits:
 - Legally operating trucking companies, law enforcement, drivers, general public
 - Also benefits non-compliant trucking companies
 - Typical enforcement weighing methods take the driver out of service for hours



NYS Legislation Overview

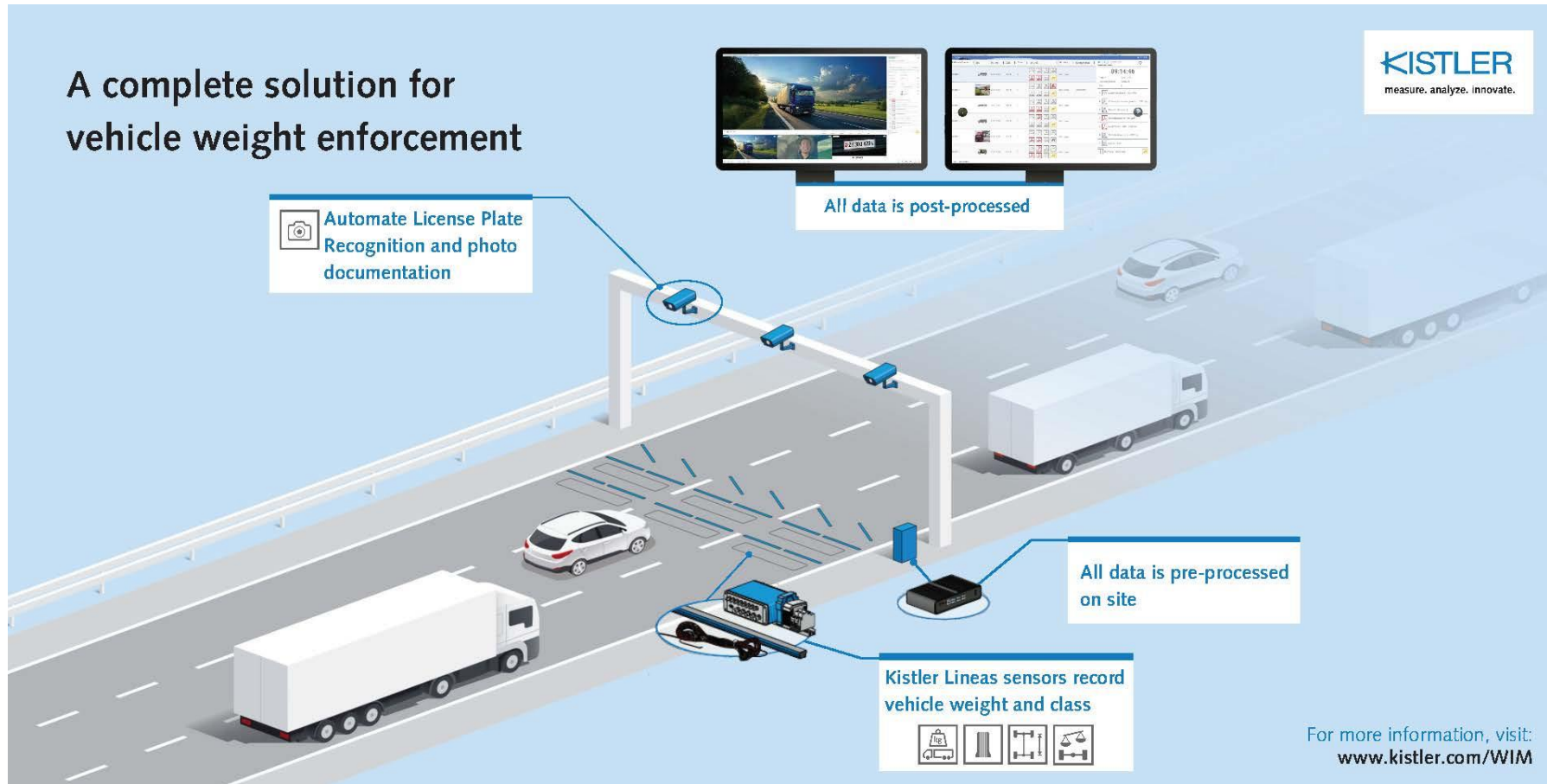
Amended in 2023: S6246/A6225

| | | |
|--------------|--|--------------------|
| Dec 23, 2021 | APPROVAL MEMO.151 | Approved. |
| Dec 22, 2021 | SIGNED CHAP.773 | |
| Dec 10, 2021 | DELIVERED TO GOVERNOR | |
| Jun 08, 2021 | Returned To Senate Passed Assembly Home Rule Request Ordered To Third Reading Rules Cal.536 Substituted For A2316a | |
| Jun 03, 2021 | Referred To Codes DELIVERED TO ASSEMBLY PASSED SENATE HOME RULE REQUEST | |
| May 24, 2021 | AMENDED ON THIRD READING 2740B | |
| Apr 26, 2021 | ADVANCED TO THIRD READING | |
| Apr 21, 2021 | 2ND REPORT CAL. | |
| Apr 20, 2021 | 1ST REPORT CAL.707 | |
| Apr 08, 2021 | PRINT NUMBER 2740A | |
| Apr 08, 2021 | AMEND AND RECOMMIT TO TRANSPORTATION | |
| Jan 25, 2021 | REFERRED TO TRANSPORTATION | Introduced. |

- Establishes a weigh-in-motion (WIM) demonstration program on certain portions of I-278 in Kings County (Brooklyn, NY), imposing monetary liability on the owner of a vehicle for failure of an operator to comply with gross vehicle weight and/or axle weight restrictions; and
- The installation and operation of up to (16) sixteen weigh-in-motion violation monitoring systems within the vicinity of the Atlantic Ave. interchange to Sands St.
- Calibration & Certification of Calibration Required every 6 months
- **Violations**
 - GVW at least **10%** above gross vehicle weight restrictions
 - FHWA GVW Limit = 80 kips or Federal Bridge Formula
 - Axle weights at least **20%** over axle weight restrictions
 - FHWA Single Axle Limit = 20 kips while NY Limit = 22.4 kips
 - FHWA Tandem Axle Limit = 34 kips while NY limit = 36 kips.
 - At least two independent weight measurements obtained by the WIM monitoring system

System Installed on QB BQE

Example of the system configuration



Warning Period

- WIM system is currently installed in the QB direction
 - 90-day warning period began on **August 10, 2023**.
- Installation for SIB direction is anticipated for late 2023, and will be followed by a 90-day warning period following installation.
- Warning notices do not carry a fine and will not accrue points or any other liability on your vehicle registration.
- At the conclusion of each 90-day warning period, violations will be issued.

NEW YORK CITY New York City Department of Finance
DOT Weigh-In-Motion Enforcement Program
PO Box 3641 Church Street Station New York,
NY 10008-3674

WIM

WARNING NOTICE

Owner's Name
Owner's Address
City, State, Zip

NOTICE #:123456789123 STATE:
PLATE #:A5742U ISSUED:
01/01/1999 12:00:00
VIOLATION DATE/TIME: 2/18/2022 13:04:12
LOCATION: EB Brooklyn-Queens Expressway

PLEASE TAKE NOTE: In accordance with New York State Vehicle and Traffic Law section 385-a, the photographed vehicle has been detected by the NYCDOT Weigh-in-Motion violation monitoring system located on that portion of Interstate Route 278 (also known as the Brooklyn-Queens Expressway) specifically from the vicinity of Atlantic Avenue to the vicinity of Sands Street in Kings County (Brooklyn), NY traveling:

- at least 10% above the gross vehicle weight limit (80,000 lbs.) at the above stated date and time.

| Gross Vehicle Weight Measured | |
|-------------------------------|--|
| Sensor Set 1 | |
| Sensor Set 2 | |

This is a Warning Notice.

There are no penalties associated with this Notice.

There are no points associated with this Notice.

No response or action is necessary.

Please be advised that Weigh-in-Motion violations may subject you to a fine.

Violations

- Starting November 10, 2023, overweight trucks captured on the BQE WIM system (QB direction only) will be subject to a \$650 fine per violation.
- Separate violations can be issued for exceeding both axle/tandem and gross weight



Gross Weight Violations

From the attached sample notice:

- Date and time of violation
- License plate photograph
- GW Measured per sensor set
- Allowable maximum Weight per bridge formula
- Link to website for view record online
- NOL issued to Owner / Responsible Party (Rental)

New York City Department of Finance
Weigh-in-Motion Enforcement Program
PO Box 3641
Church Street Station New York, 10008-3641

NOTICE OF LIABILITY / CERTIFICATE CHARGING THE LIABILITY

THE CITY OF NEW YORK
VS
FEDEX GROUND PACKAGE SYSTEM INC
1000 FEDEX DRIVE
CORAOPOLIS, PA 15108

PLEASE TAKE NOTE:
In accordance with New York State Vehicle and Traffic Law section 385-a, the photographed vehicle has been detected by the NYCDOT Weigh-in-Motion (WIM) violation monitoring system located on that portion of Interstate Route 278 (also known as Brooklyn-Queens Expressway) specifically from the vicinity of Atlantic Avenue to the vicinity of Sands Street in Kings County (Brooklyn), NY traveling:

- at least 10% above the gross vehicle weight limit (80,000 lbs.)

 In issuing this notice, the lowest measured value given between Sensor Set 1 and Sensor Set 2 have been used, and all violations account for the tolerance of the WIM system.
 You are liable to pay a monetary penalty for the amount shown. This amount is due within 30 days of the date of this Notice. Photographs evidencing the plate and violation are shown. Please see the reverse of this Notice for further instructions.



View your records online at
<https://wimviolations.nyc.gov/>

NOTICE #:

PIN:

ISSUE DATE: DUE DATE:

| VIOLATION DATE | VIOLATION TIME | FINE AMOUNT |
|----------------|----------------|-------------|
| 2/18/2022 | 1:04 PM | \$650.00 |

LOCATION

EB Interstate 278 (Brooklyn-Queens Expressway) MP 2.9 Lane 2; specifically, from the vicinity of Atlantic Avenue to the vicinity of Sands Street in Kings County (Brooklyn), NY

| | | | |
|--|--|---|--|
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Gross Weight Measured (lbs.) Sensor Set 1. 91920 Sensor Set 2. XXXXX</td> <td style="padding: 2px;">Maximum Gross Vehicle Weight (lbs.) 80000</td> </tr> </table> | Gross Weight Measured (lbs.) Sensor Set 1. 91920 Sensor Set 2. XXXXX | Maximum Gross Vehicle Weight (lbs.) 80000 | |
| Gross Weight Measured (lbs.) Sensor Set 1. 91920 Sensor Set 2. XXXXX | Maximum Gross Vehicle Weight (lbs.) 80000 | | |

There are no points associated with this Notice








| Capture Details: | | | |
|--|------------------------|--------------------|--|
| Date/Time | 07/28/2023 05:55:13 AM | Location | EB BQE (I-278) MP 2.9 Lane 2; Interstate route 278 specifically from the vicinity of Atlantic Avenue to the vicinity of Sands Street in Kings County, NY |
| License Plate USDOT Number | | Axle Spacing (ft.) | Spacing: S1= ~~, S2= ~~, S3= ~~, S4= ~~, S5= ~~, S6= ~~, S7= ~~ |
| Weight Details: | | | |
| FHWA 4 Axles Gross Weight 92,180 lbs(W1=18,080 lbs, W2=13,980 lbs, W3=30,520 lbs, W4=29,600 lbs) | | | |
| FHWA 4 Axles Gross Weight 88,700 lbs(W1=17,380 lbs, W2=13,600 lbs, W3=29,720 lbs, W4=28,000 lbs) | | | |

Axle Weight Violations

From the attached sample notice

- Date and time of violation
- License plate photograph
- Each Axle Weight Measured per sensor set
- Allowable maximum for the axle in violation per bridge formula
- Additional tabulation of axle spacing and weights for identification of axle in question, e.g., tandem
- Link to website for view record online
- NOL issued to Owner / Responsible Party (Rental)

| Capture Details: | | | |
|--|------------------------|--|--|
| Date/Time | 07/28/2023 05:55:13 AM | Location | EB BQE (I-278) MP 2.9 Lane 2; Interstate route 278 specifically from the vicinity of Atlantic Avenue to the vicinity of Sands Street in Kings County, NY |
| License Plate USDOT Number | [REDACTED] | Axle Spacing (ft.) | Spacing: S1=, S2=, S3=, S4=, S5=, S6=, S7= |
| Axle Weight Details: | | | |
| Sensor Set 1: 18,080 lbs; 13,980 lbs; 30,520 lbs; 29,600 lbs | | Sensor Set 2: 17,380 lbs; 13,600 lbs; 29,720 lbs; 28,000 lbs | |

New York City Department of Finance
Weigh-in-Motion Enforcement Program
PO Box 3641
Church Street Station New York, 10008-3641

NOTICE OF LIABILITY / CERTIFICATE CHARGING THE LIABILITY

THE CITY OF NEW YORK
VS
FEDEX GROUND PACKAGE SYSTEM INC
1000 FEDEX DRIVE
CORAOPOLIS PA 15108

PLEASE TAKE NOTE:
In accordance with New York State Vehicle and Traffic Law section 385-a, the photographed vehicle has been detected by the NYCDOT Weigh-in-Motion (WIM) violation monitoring system located on that portion of Interstate Route 278 (also known as Brooklyn-Queens Expressway) specifically from the vicinity of Atlantic Avenue to the vicinity of Sands Street in Kings County (Brooklyn), NY traveling:

- at least 20% above the axle weight limit (22,400 lbs. for a Single Axle and 36,000 lbs. for a Tandem-Axle) at the stated date and time.

In issuing this notice, the least measured values given by Sensor Set 1 and Sensor Set 2 have been used, and all violations account for the tolerance of the WIM system. You are liable to pay a monetary penalty for the amount shown. This amount is due within 30 days of the date of this Notice. Photographs evidencing the plate and violation are shown. Please see the reverse of this Notice for further instructions.



View your records online at
<https://wimviolations.nyc.gov/>

NOTICE #: 2

PIN: 5548

| | | | |
|-------------|-----------|-----------|-----------|
| ISSUE DATE: | 5/17/2022 | DUE DATE: | 6/16/2022 |
|-------------|-----------|-----------|-----------|

| VIOLATION DATE | VIOLATION TIME | FINE AMOUNT |
|----------------|----------------|-------------|
| 2/18/2022 | 1:04 PM | \$650.00 |

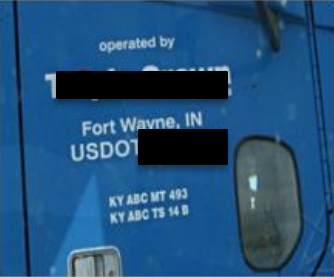
LOCATION

EB Interstate Route 278 (Brooklyn-Queens Expressway) MP 2.9 Lane 2; specifically, from the vicinity of Atlantic Avenue to the vicinity of Sands Street in Kings County (Brooklyn), NY

| Axle Weights Measured (lbs.) | Maximum Axle Weight (lbs.) |
|--|----------------------------|
| Sensor Set 1: XXXXX; XXXXX; XXXXX; XXXXX | Single Axle: 22400 |
| Sensor Set 2: XXXXX; XXXXX; XXXXX; XXXXX | |
| | Tandem-Axle: 36000 |

There are no points associated with this Notice





Adjudication Process-Payment Options

Payments are made to NYC Department of Finance, and can be in

- In person
- By Check
- Online

Make your check or money order payable to the **NYC Department of Finance**

DO NOT MAIL CASH

Write on the front of your payment:

- 1) the 10-digit Notice Number
- 2) Your Plate Number
- 3) Your State of Registration
- 4) Your Plate Type

Insert this tear off coupon in the enclosed envelope

NYC DEPARTMENT OF FINANCE
 Weight-in-Motion
 Enforcement Program
 PO BOX 3641
 CHURCH STREET STATION
 NEW YORK, NEW YORK 10008-3641

Detach and mail this coupon with your payment



| | | | |
|------------------------------------|---------------------|-----------------------------|--------------------------------|
| NAME [REDACTED] | | | AMOUNT DUE \$650.00 |
| NOTICE NUMBER 4500002340 | VERSION 2 | ISSUED 08/03/2023 | DUE DATE 09/02/2023 |
| PLATE NUMBER [REDACTED] | STATE [REDACTED] | TYPE COMMERCIAL | WIM SYSTEM ID 870501 |

Adjudication Process – Dispute Request

- Notice of Liability (NOL) will include instructions should you wish to dispute, requests must be within 30 days of notice.
- Request hearing online, by mail or in person
- All adjudications will occur at the Department of Finance – Parking Violations Bureau

Notice of Liability Sample

If we do not receive your payment or request to dispute the liability within 30 days of the date of this Notice, it shall be deemed an admission of liability and that a default judgment may be entered thereon; and you will be subject to an additional \$25 penalty.

If you or the driver of the vehicle have already been found liable for this violation and paid the amount due, you do not have to pay again. If you have paid, mail a copy of this Notice with copies of the front and back of your proof of payment to: NYC Department of Finance, Weigh-In-Motion Enforcement Program Unit, 66 John Street, Third Floor, New York, New York 10038-3728. If your vehicle was stolen prior to the date of violation, mail a copy of this Notice, along with a CERTIFIED COPY of the Stolen Vehicle Police Report to: NYC Department of Finance, Weigh-In-Motion Enforcement Program, 66 John Street, Third Floor, New York, New York 10038-3728.

TO DISPUTE THIS VIOLATION: If you want to dispute this liability, you can do so online, by mail or in person.

ONLINE HEARING: Please go to our website at nyc.gov/finance.

HEARING BY MAIL: Send a letter of explanation within 30 days of the date of this Notice, along with copies of any proof (documents, statements, etc.) you may have to: NYC Department of Finance, Hearing by Mail Unit, P.O. Box 29021, Cadman Plaza Station, Brooklyn, New York, 11202-9021.

IN PERSON HEARINGS: You may also dispute liability in person within 30 days of the date of this Notice at any of the following NYC Department of Finance Business Centers. You do not need an appointment. If you, the registrant, wish to designate someone else to attend your hearing, fill in and sign the Representation Section below and give it to your designee. Make sure to tell your designee that the signed Representation section must be submitted at the hearing.

| | | | | |
|--|---|--|--|---|
| BROOKLYN 210 Joralemon Street First Floor Brooklyn, NY 11201 | QUEENS 144-06 94th Avenue First Floor Jamaica, NY 11435 | MANHATTAN 66 John Street Second Floor New York, NY 10038 | BRONX 3030 Third Avenue Second Floor Bronx, NY 10455 | STATEN ISLAND 350 St. Marks Place First Floor Staten Island, NY 10301 |
|--|---|--|--|---|

PAYMENTS

PAY ONLINE: Payment can be made by electronic check and credit or debit card at nyc.gov/finance. Payments by electronic check are free. There is a convenience fee for credit and debit card payments.

PAY BY MAIL: Make your check or money order payable to the NYC Department of Finance. Be sure to put the Notice Number, as well as your Vehicle Plate Number, the State of Registration and Vehicle Plate Type (passenger, commercial, etc.) on the face of your payment. Send payments to: NYC Department of Finance, Weigh-In-Motion Enforcement Program, Post Office Box 3641, Church St. Station, New York, New York 10008-3641.

PAY IN PERSON: You can also pay in person at any of the NYC Department of Finance Business Centers listed above. Call 311 to find out the days and hours the Centers are open. You can pay by check, money-order, cash, credit, or debit card. If you pay by credit card there is a small service fee. Bring this Notice with you.

When you provide a check as payment, you authorize us either to use information from your check to make a one-time electronic fund transfer from your account or to process the payment as a check transaction.

LESSORS (COMMERCIAL TRUCK RENTAL COMPANIES)

If this plate was enrolled in the Rental Program administered by the NYC Department of Finance under VTL Section 239 on the date of the alleged violation, you may transfer liability of such to the lessee when it appears on your Weekly Rental Summons Report (220).

FOR FURTHER INFORMATION

Go to nyc.gov/finance or call 311. Outside of New York call 212-NEW-YORK (212-639-9675). Hearing Impaired TTY call 212-639-9675 or visit any of the above NYC Department of Finance Business Centers. For frequently asked questions and to view your records go to www.WIMViolations.dot.gov

REPRESENTATION SECTION

If you would like to authorize someone else to appear on your behalf at an in-person hearing, enter the requested information below, sign this form and give it, along with any evidence (documents, statements, etc.) you may have to your designee.

I, _____ am the registrant of the Vehicle bearing Plate Number: _____

(PRINT NAME)

(PLATE NUMBER)

hereby authorize _____ to appear on my behalf.

(REPRESENTATIVE'S NAME)

Signed,

Understanding the Bridge Formula

3

Understanding Bridge Formula

Maximum Gross Vehicle Legal Limit

- 80,000 lbs. **or less** depending on axle spacing

Maximum axle weight

- 22,400 lbs. single axle
- 36,000 lbs. on tandem axle

System measures number and spacing of axles and calculates maximum legal limits

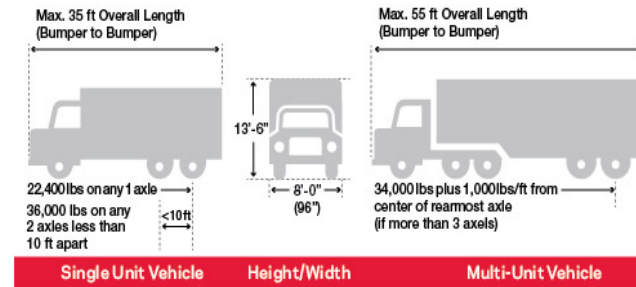
Vehicles that exceed legal limits need to apply for a permit with NYC DOT, which includes a routing map.

Permits issued by NYC DOT already direct trucks away from the BQE.

Size and Weight Restrictions

Commercial vehicles may not travel on parkways. All commercial drivers must use [Local and Through truck routes](#) to the intersection nearest their destination. All posted restrictions must be obeyed. Vehicles exceeding any of these dimensions must obtain a daily over-dimensional vehicles permit for each trip (going and coming back).

» [Apply for a daily permit for over-dimensional vehicles](#)



Maximum weight limit for vehicles is 80,000 pounds or less, depending upon axle spacing. Bridges or viaducts may have lower weight limits posted. The legal weights are outlined below.

» See Section 4-15 (b) (6) thru (10) of the [Traffic Rules](#) for more details.

All vehicles must obey posted capacity or height clearance of all structures.

Legal Weights For Trucks with Pneumatic Tires¹

| Wheels/Axles | Weight |
|----------------------------|-------------------------|
| Per Inch of Tire Width | 800 lbs |
| Any One Wheel | 11,200 lbs |
| Any One Axle | 22,400 lbs |
| Any Two Axles ² | 36,000 lbs |
| 3 or More Axles | 80,000 lbs ³ |

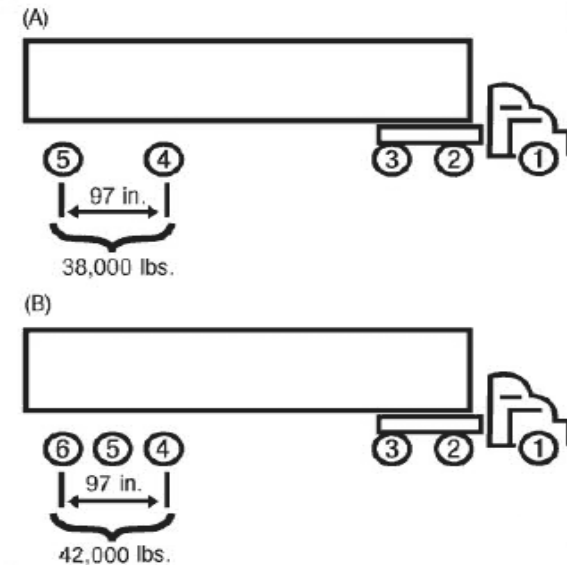
1. A vehicle equipped with solid rubber tires is permitted up to 80% of legal load for pneumatic tires.

2. When such axles are spaced less than 10 feet, but not less than 4 feet 6 inches.

3. Maximum weight limit is computed as 34,000 lbs, plus 1,000 lbs per foot of distance between the first and last axles. 80,000 lbs is the outer limit for all cases.

Drop Axle Configuration

- Observed the same truck on two different days
- The truck's 6th axle is down (right image), while the day before (below image), the operator drove with the 6th axle up, impacting the load distribution.



Information & Resources

4

Available Information

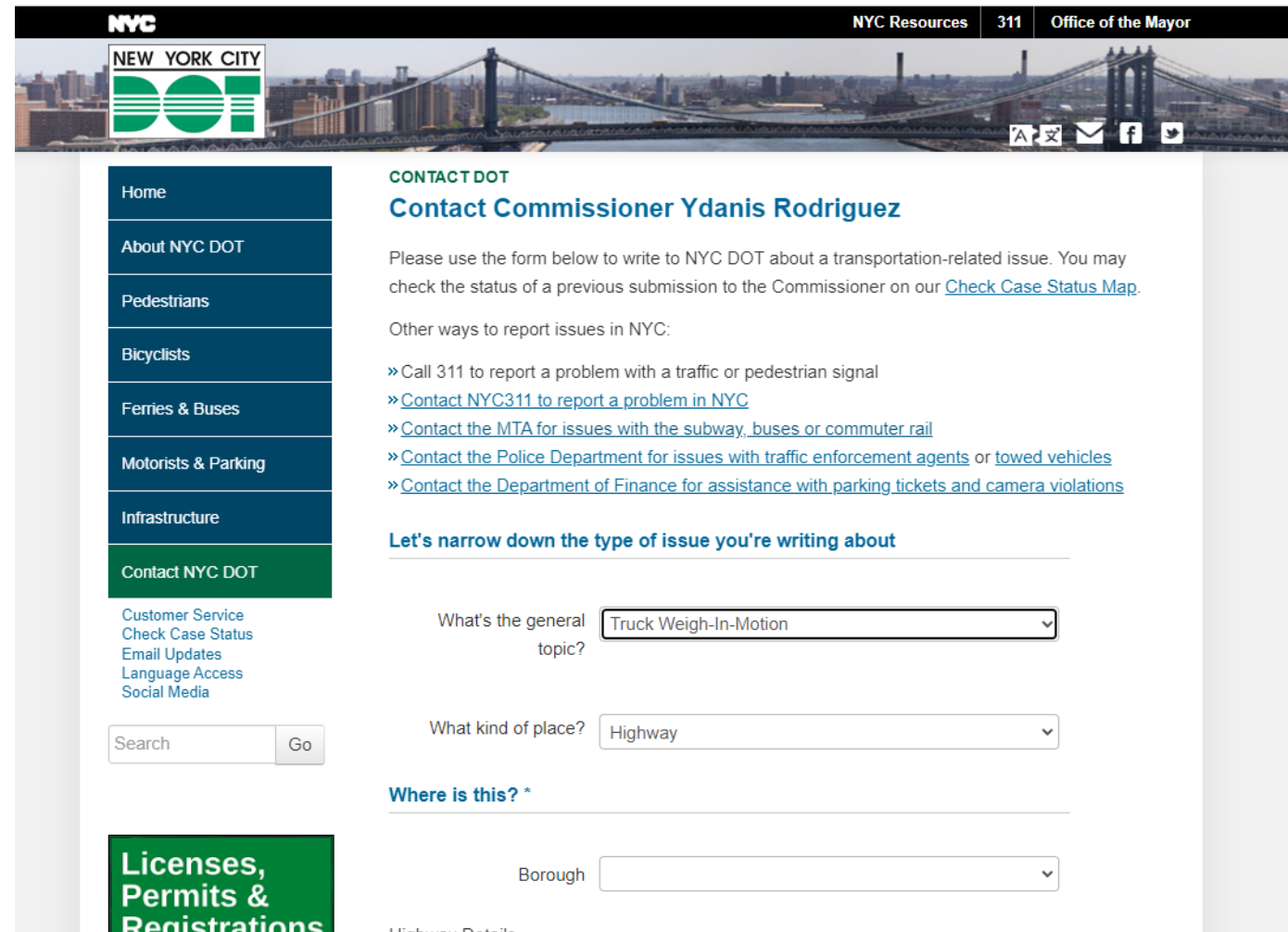
Resources

- **More information:** [nyc.gov/TruckWeightLimits](https://www.nyc.gov/TruckWeightLimits)
 - Size & Weight Restrictions, BQE WIM Program
 - Frequently Asked Questions
- **Obtaining Overdimensional Permits:** <https://www.nyc.gov/html/dot/html/motorist/oversize.shtml>
- NYC DOT publishes the [New York City Truck Route Map](#) & [Parkway Restriction Brochures](#). **Companies can request free print copies online**

Contact NYC DOT

Feedback

- Submit questions or concerns to NYC DOT online:
<https://www.nyc.gov/html/dot/html/contact/contact-form.shtml>



The screenshot shows the NYC DOT website's contact page. At the top, there is a navigation bar with 'NYC' on the left, 'NYC Resources' and '311' in the center, and 'Office of the Mayor' on the right. Below this is a banner image of a bridge over water. The main content area is divided into a left sidebar and a main right section. The sidebar contains a vertical menu with links: Home, About NYC DOT, Pedestrians, Bicyclists, Ferries & Buses, Motorists & Parking, Infrastructure, and Contact NYC DOT (highlighted in green). Below the menu are links for Customer Service, Check Case Status, Email Updates, Language Access, and Social Media, along with a search bar and a 'Go' button. At the bottom of the sidebar is a green button labeled 'Licenses, Permits & Registrations'. The main right section is titled 'CONTACT DOT' and 'Contact Commissioner Ydanis Rodriguez'. It contains a paragraph of text, a list of other ways to report issues (including 311, NYC311, MTA, Police Department, and Department of Finance), and a section titled 'Let's narrow down the type of issue you're writing about'. This section includes three dropdown menus: 'What's the general topic?' (selected: Truck Weigh-In-Motion), 'What kind of place?' (selected: Highway), and 'Where is this? *' (selected: Borough).

Other Updates

BQE Interim Repairs

- Throughout this process, NYC DOT will continue with urgent repairs to the Atlantic-to-Sands section to ensure it remains safe.
- Weekend Closure related to Interim Repair on QB BQE – Dates to be shared shortly, detour routes will be per <https://www.nyc.gov/html/dot/downloads/pdf/bqe-public-outreach-interim-repairs.pdf>

2023-2024 Interim Repairs



Thank You!

Questions?

Learn more about BQE Corridor Vision at nyc.gov/bqe



NYCDOT



nyc_dot



nyc_dot



NYCDOT