



Grand St, Metropolitan Ave, Morgan Ave Street Improvements Workshop

March 30, 2023



Introduction

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Workshop Overview

I. Presentation (30 min)

1. Workshop Overview & Goals
2. Background
3. Focus Areas for Discussion
4. Street Improvement Toolbox

II. Breakout Groups (45 min)

1. Facilitated Discussion & Feedback

III. Group Share Back (15 min)

IV. Conclusion (5 min)



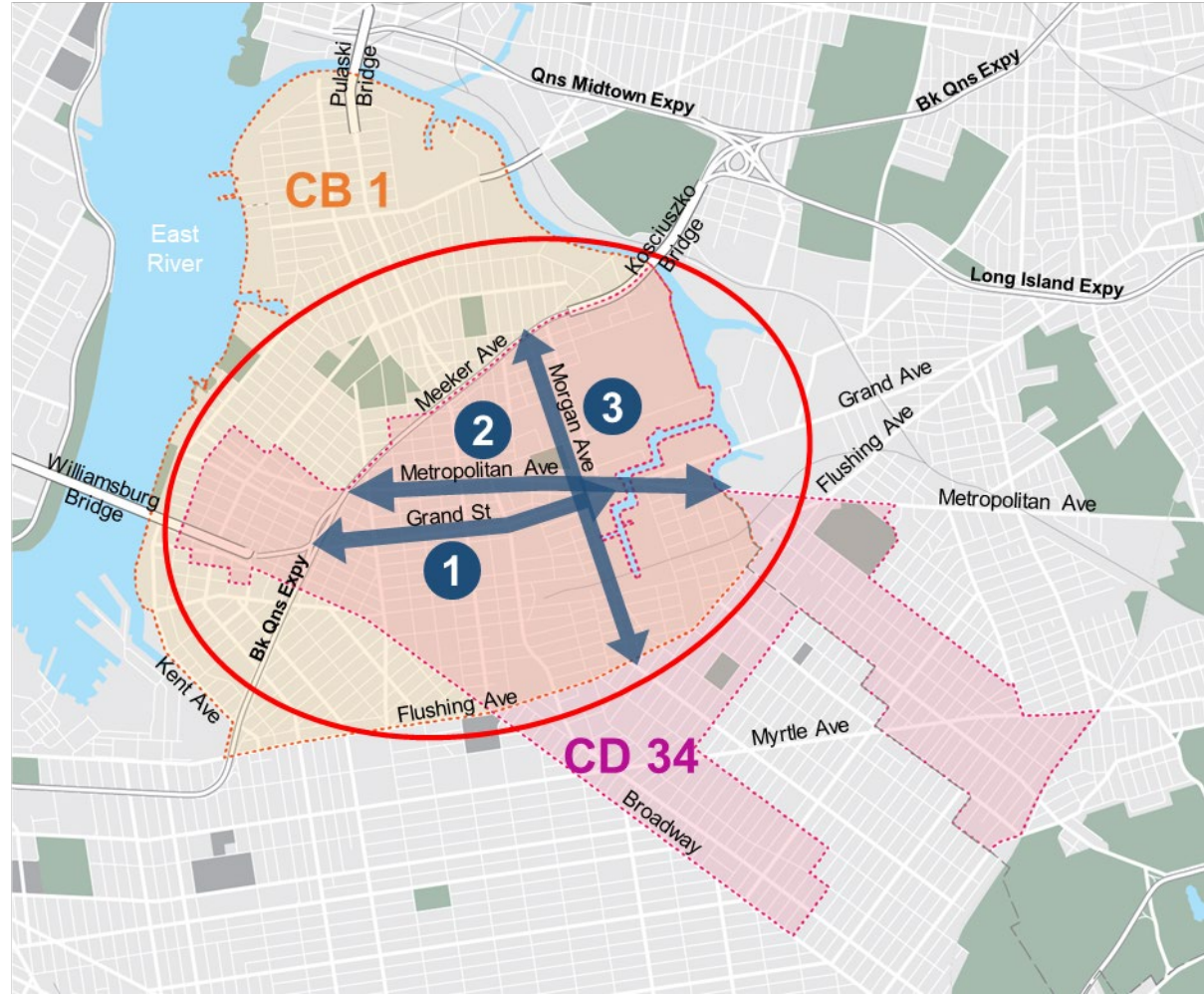
Workshop Area

Workshop will focus on transportation issues in the area that overlaps:

- **City Council District 34:** CM Jennifer Gutiérrez
- **Brooklyn Community Board 1**

Discussion Areas:

- 1 Grand St
- 2 Metropolitan Ave
- 3 Morgan Ave



Workshop Goals

The purpose of this workshop is to **gather feedback** that will help DOT:

- **Improve safety and circulation** within the workshop focus area
- **Understand community preferences** for street improvement designs

Feedback gathered from the workshop will be used to inform DOT's future work in the area

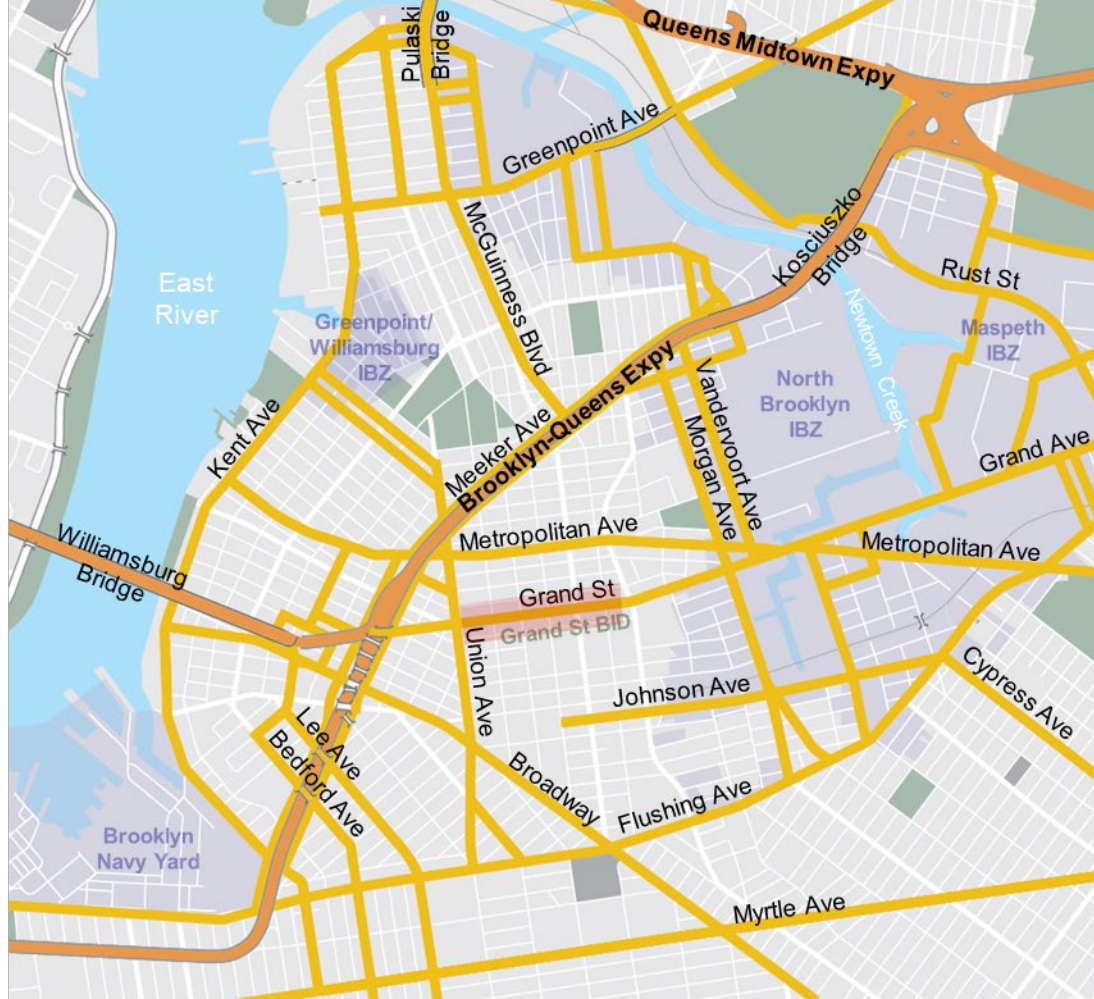
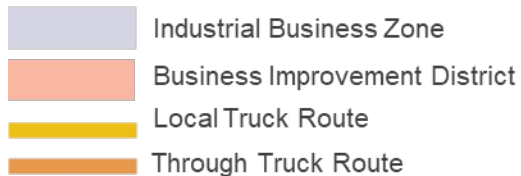


Background

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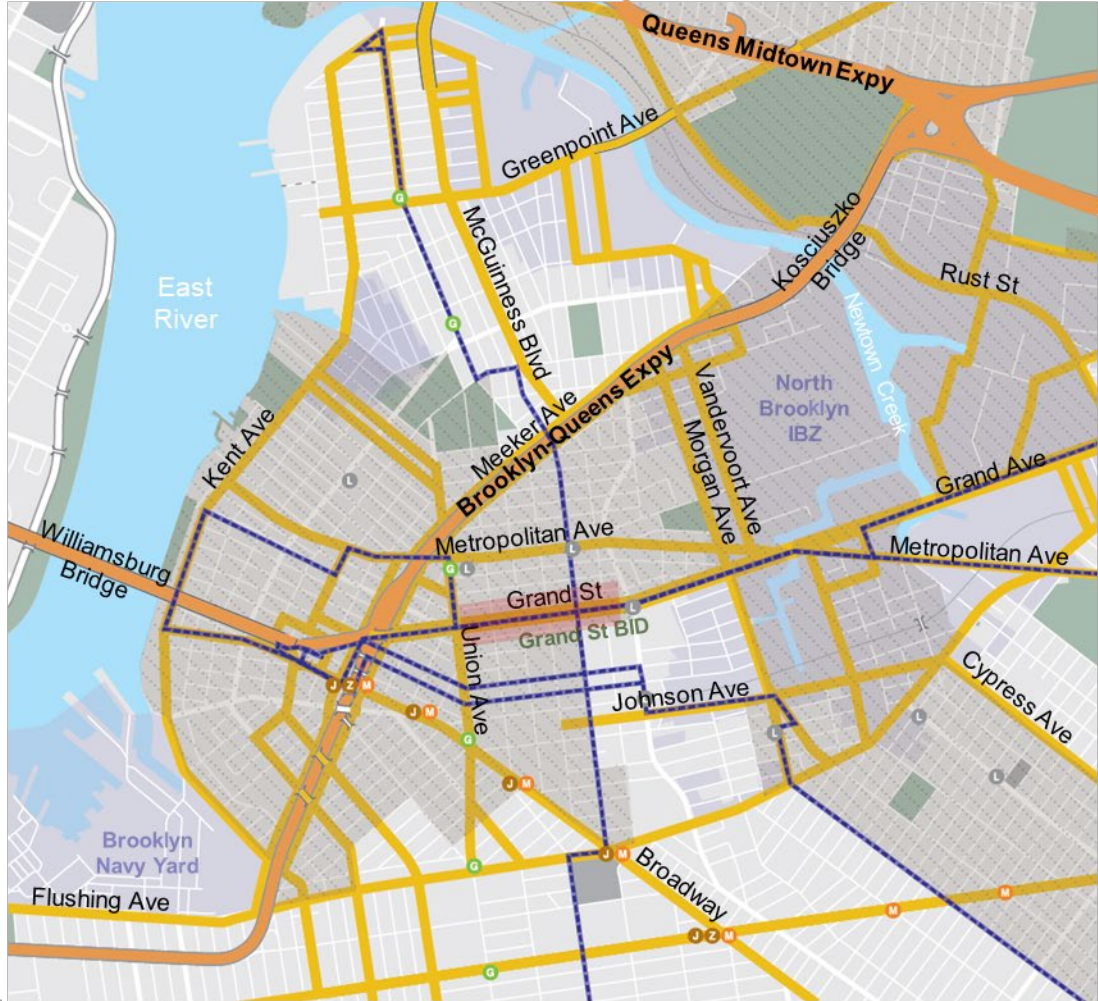
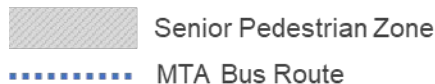
Existing Conditions

- High concentration of **industrial businesses**: **North Brooklyn IBZ** in **top 3 of 21 IBZs** in terms of freight activity
- **Commercial corridors** and **nightlife**
- Street network provides **limited connections for through traffic**
- High **truck volumes** delivering goods to and from, and operating within IBZ
- **Demand** for commercial deliveries: **68% increase in freight** predicted by 2045



Existing Conditions

- **Vision Zero Priority Area** and **Senior Pedestrian Zones**
- **Trip generators:** schools, housing, jobs and recreation along **commercial corridors**
- **Transit:**
 - L, G, J/M subway lines
 - Q54, Q59, B24 Bus Routes to/from Queens
 - B43 and B48 to/from Central BK
- Local **deliveries, shoppers and local residents** prioritize daytime loading hours; parking in evening hours



Existing Conditions

- **Bike Network Expansion in North Brooklyn**
 - Williamsburg Bridge Access (2017)
 - Grand Street Protected Bike Lane (2018)
 - Bushwick and Ridgewood Bike Network (2014-2018)
- **On-going and future work:** on Meeker Ave and McGuinness Blvd street improvement projects
- **Cycling numbers have grown in response**
 - **1.8M** Citi Bike trips originated in BK CB1 in 2022
 - Williamsburg Bridge: **most daily cyclist crossings** of East River; **+11%** 2019-2021



Existing Conditions

Overlapping demands reveal stresses on the road network:



People of all ages and abilities



Bicycle and micromobility users



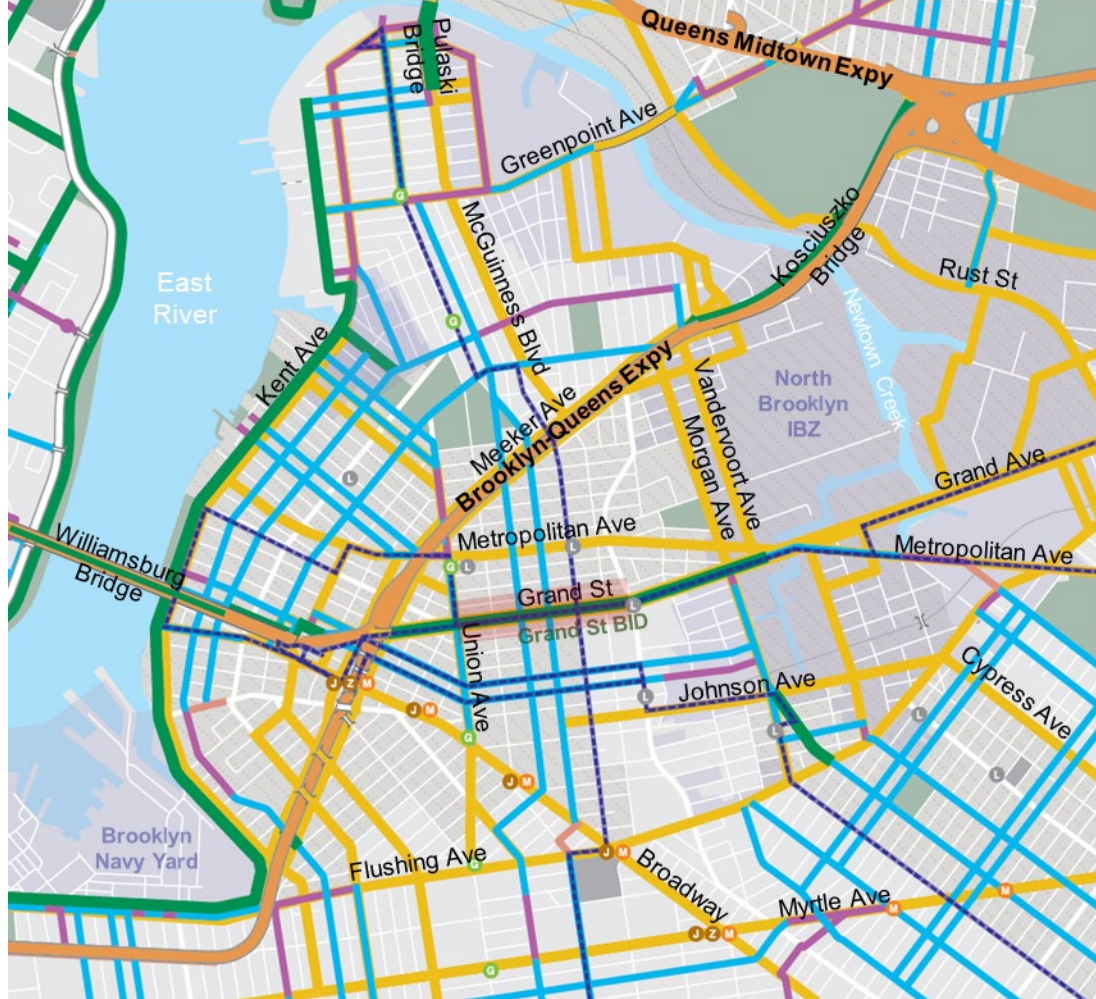
Subway and bus users



Truck generators, critical truck routes serving IBZ



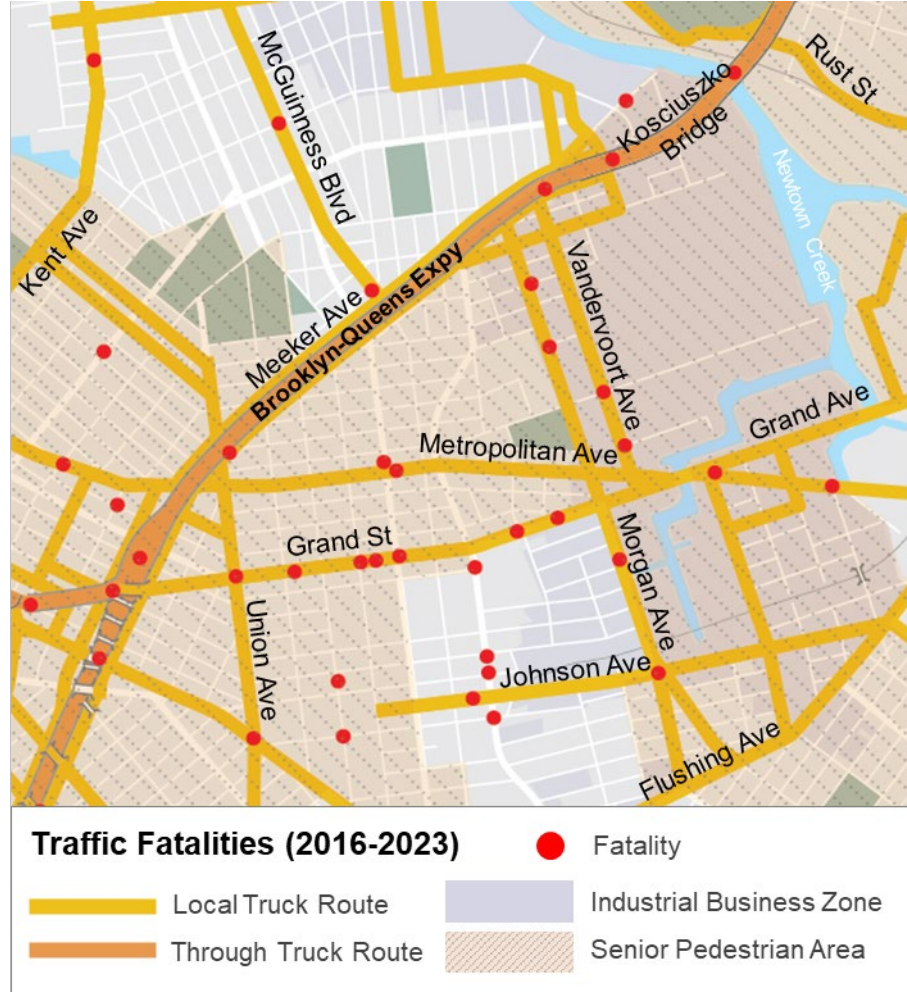
Local commercial and industrial deliveries



Vision Zero

Major E/W and N/S corridors are truck routes ranking in **the top third of high-crash corridors** in Brooklyn.

- **Grand St:**
Vision Zero Priority Corridor and Truck Priority Safety Corridor
22 people seriously injured (2016-2020), 7 Fatalities (2016-2023)
- **Metropolitan Ave:**
Vision Zero Priority Corridor and Truck Priority Safety Corridor
15 people seriously injured (2016-2020), 3 Fatalities (2016-2023)
- **Morgan Ave:**
17 people seriously injured (2016-2020), 4 Fatalities (2016-2023). Ranks top 33% in BK



Community Concerns

Community has raised concerns with lack of loading space, blocked bike lanes, bus stops and sidewalks, and employee safety at commercial/industrial businesses

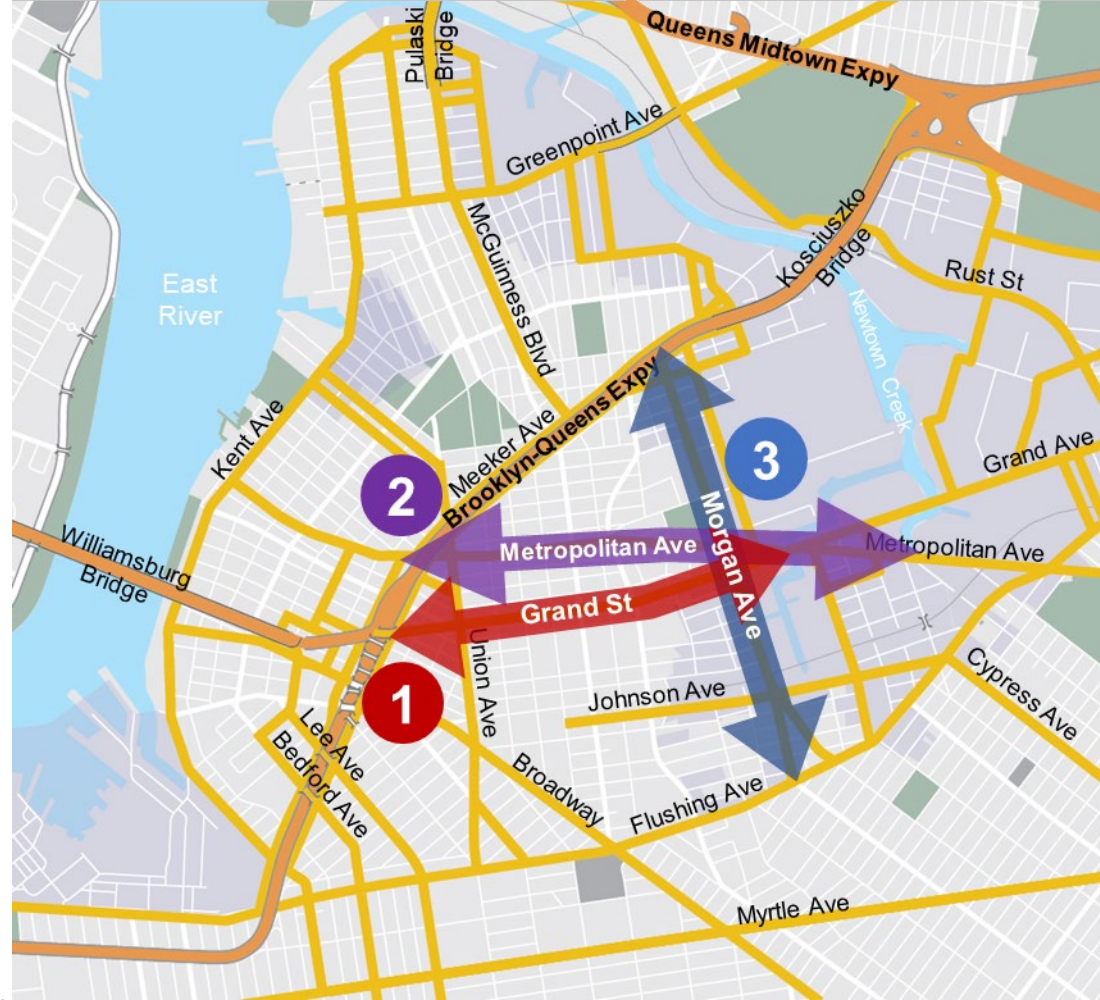


Focus Areas for Discussion

3

Areas Identified for Discussion

- 1 Grand St
- 2 Metropolitan Ave
- 3 Morgan Ave



Central Issues



Vision Zero Priority Area,
Senior Pedestrian Areas;
high number of pedestrians
killed or severely injured



Blocked bike lanes;
network gap North/South
through IBZ



Critical east-west bus routes
including Q54, Q59, B24,
connections to B43 and B48
with **slow speeds**



Challenging street network
with **limited connections for**
through traffic



Curb access challenges for
commercial deliveries,
visitors, and residents



Grand St



Metropolitan Ave



Morgan Ave



Grand St

1 Grand St

- **Connects** Western Queens and Bushwick to Brooklyn, Manhattan **via bridges and BQE**
- **One of few streets that crosses Newtown, Maspeth Creeks** and English Kills waterways via the **Metropolitan Ave Bridge**
- **Local truck route** serving commercial and industrial areas, **generating high truck volumes and loading demand**
- **Most direct route** to **Williamsburg Bridge** from Ridgewood, Maspeth and Central Queens
- **>18,000 daily bus riders** rely on **Q54** to/from Jamaica; **Q59** to/from Rego Park



1 Grand St

Background:

2008:
Wide travel
lanes, no
separation



2018-2019:
Parking protected
curbside bike
lanes



2009:
Standard
bike lanes,
narrow lanes



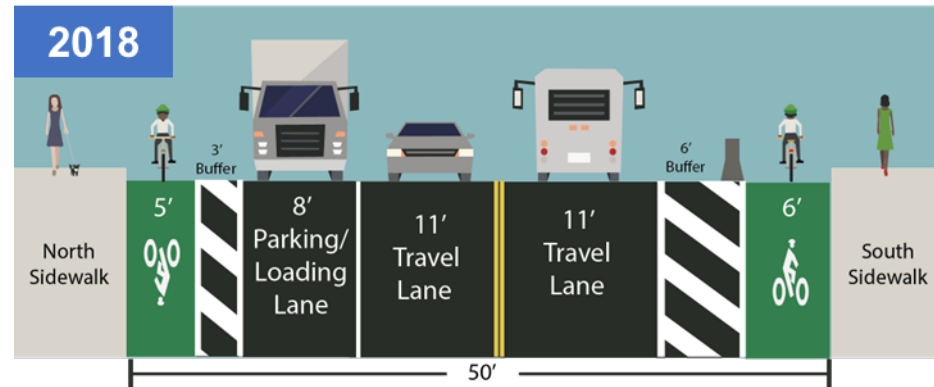
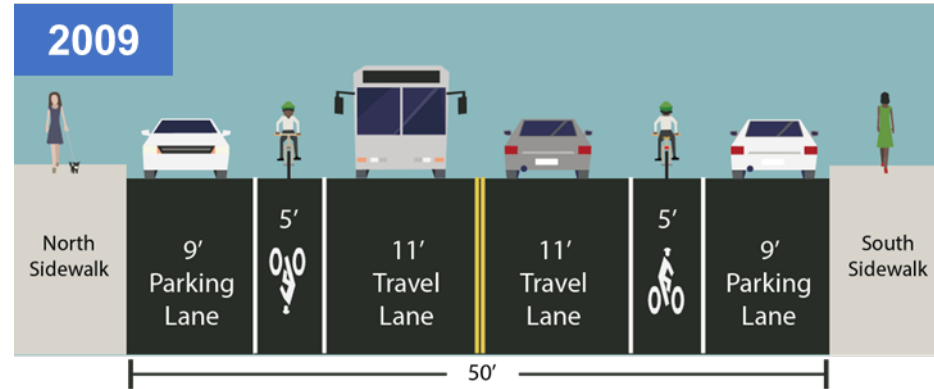
2022:
Jersey barrier
protection added



1 Grand St

Design Considerations:

- **Pedestrian Safety:** Vision Zero Priority Corridor, Senior Pedestrian Zone, high foot traffic
- **Cycling Corridor:** Keep cyclists safe with lanes wide enough to clean curb
- **Bus Route:** Corridor must keep traffic flowing so buses are not stuck in congestion
- **Commercial District:** Street parking valued by business owners, loading zones needed for deliveries
- **Truck Route:** Important east-west truck route, design must accommodate large vehicles



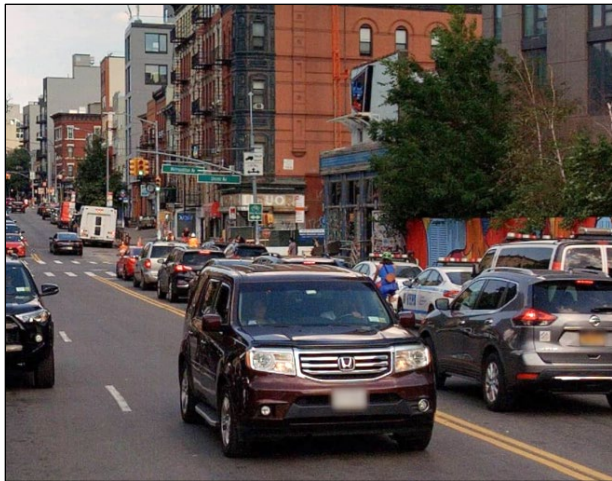
2 Metropolitan Ave

Background:

- Through street and local truck route **that connects North Brooklyn and Central Queens**, carries **traffic to/from BQE**
- One of few streets that **crosses Newtown Creek** via the **Metropolitan Ave Bridge**
- Critical route for **industrial trucks and deliveries** connecting to BQE, Western Queens, IBZs
- East of **Metropolitan Ave Bridge**, serves as important **transit and cycling corridor** given **limited street network**



Metropolitan Ave



West of Bridge

Pinches to 40' wide, no parking in peak direction during rush hour

- Bike route to Union Ave and N 5/6 Sts near BQE



Metropolitan Ave Bridge

"Bow-tie" creates a pinch point with high vehicular volumes

- 1,700 vehicles AM peak
- 1,400 vehicles PM peak



East of Bridge

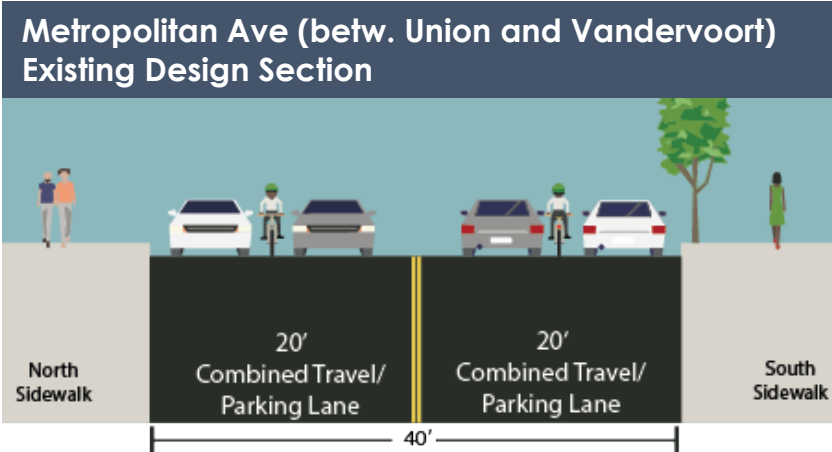
Wide, median separated with standard bike lane to Onderdonk St

- Roadway narrows to 40' in Queens

2 Metropolitan Ave

Design Considerations:

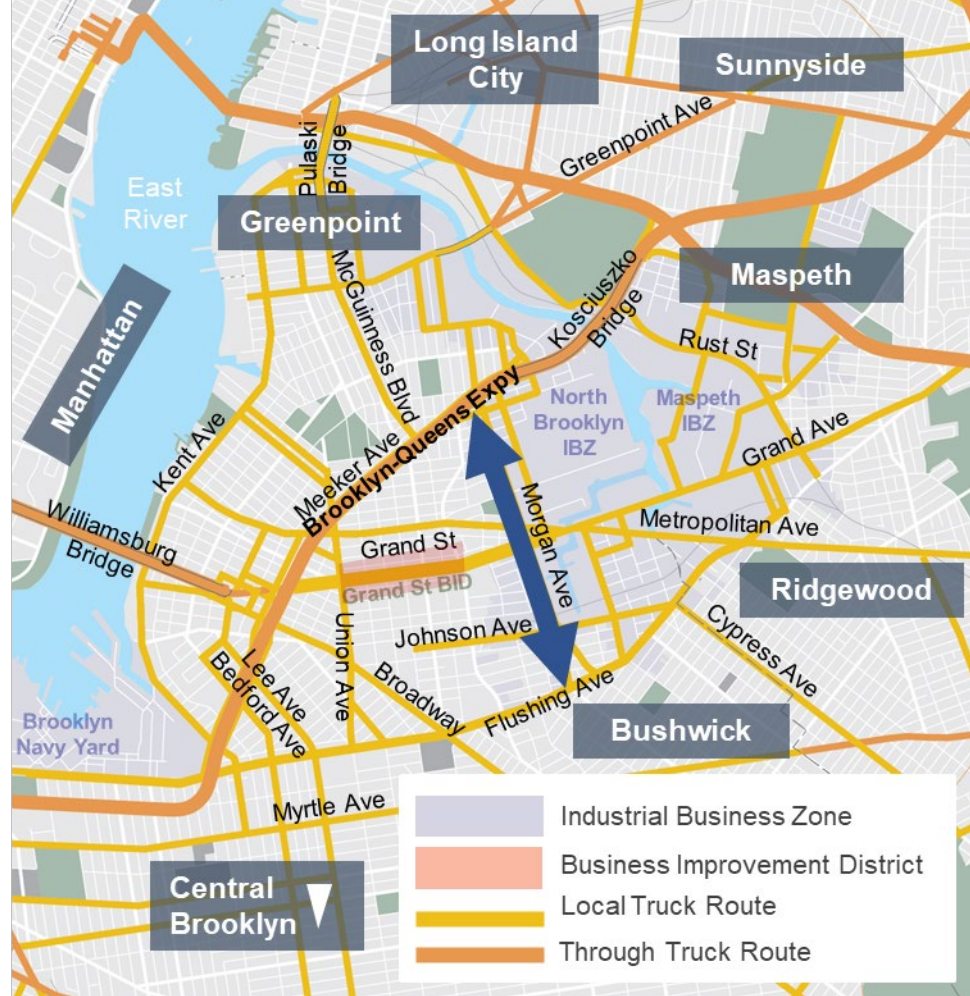
- **Pedestrian Safety:** Vision Zero Priority Corridor, Senior Pedestrian Zone, high foot traffic
- **Bike Route:** Sole crossing over the Newtown Creek, connecting Brooklyn and Queens neighborhoods and job centers
- **Bus Route:** Corridor must keep traffic flowing so buses are not stuck in congestion, multiple subway stations
- **Commercial District:** Street parking valued by business owners, loading zones needed for deliveries
- **Truck Route:** Important east-west truck route, design must accommodate large vehicles



3 Morgan Ave

Background:

- **Through street** and **local truck route** from Meeker Ave to Flushing Ave, **connects to BQE** and **serves IBZ**
- **One of few through north-south streets** in Williamsburg intersecting **Grand St** and **Metropolitan Ave**
- **Morgan Ave curbside bike lane** installed from Grand St to Grattan St in 2018 **as safety measure**
- **Bike Network Gap:** Lack of N/S routes north of Grand St to Meeker Ave, **Queens** via **Kosciusko** or **Pulaski Bridges**



3 Morgan Ave

Background:

2017:
Wide travel
lanes, no
separation



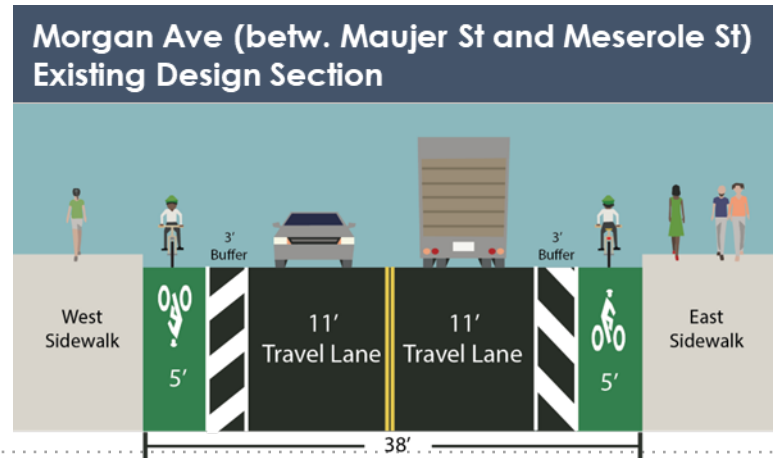
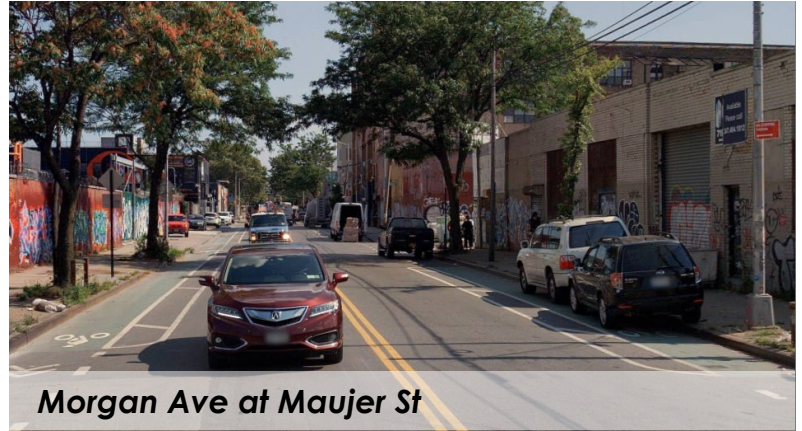
2018:
Curbside
buffered
bicycle lanes
installed



3 Morgan Ave

Design Considerations:

- **Cycling Corridor:** Curbside lanes south of Maujer St, direct route to Kosciusko Bridge Path
- **Industrial Business Zone:** Truck generator, large driveways. Blocked bike lanes and sidewalks suggest loading need.
- **Truck Route:** Important north-south truck route that connects to BQE. Design must accommodate large vehicles.
- **Geometric Constraints:** Roadway pinches to 30', only through-street south of Grand St



Street Improvement Toolbox

4

Toolkit: General Safety Enhancements

Markings Organize the Roadway to Increase Safety

High Visibility Crosswalks



Curb Extensions



Bike Lanes



Complete streets and street redesigns improve safety for *all* road users, including cyclists, pedestrians, drivers, and bus riders.

Toolkit: Intersection Improvements

Slow Turn Boxes



Pedestrian Refuge Islands



Daylighting w/ Bike Corral



Traffic Control Signals & Timing



Turn Lanes with Signal Phase



Traffic Control Signs

Toolkit: Freight Mobility

Enhance Safety, Connectivity & Curb Access



Truck Route Management



Neighborhood Loading Zones

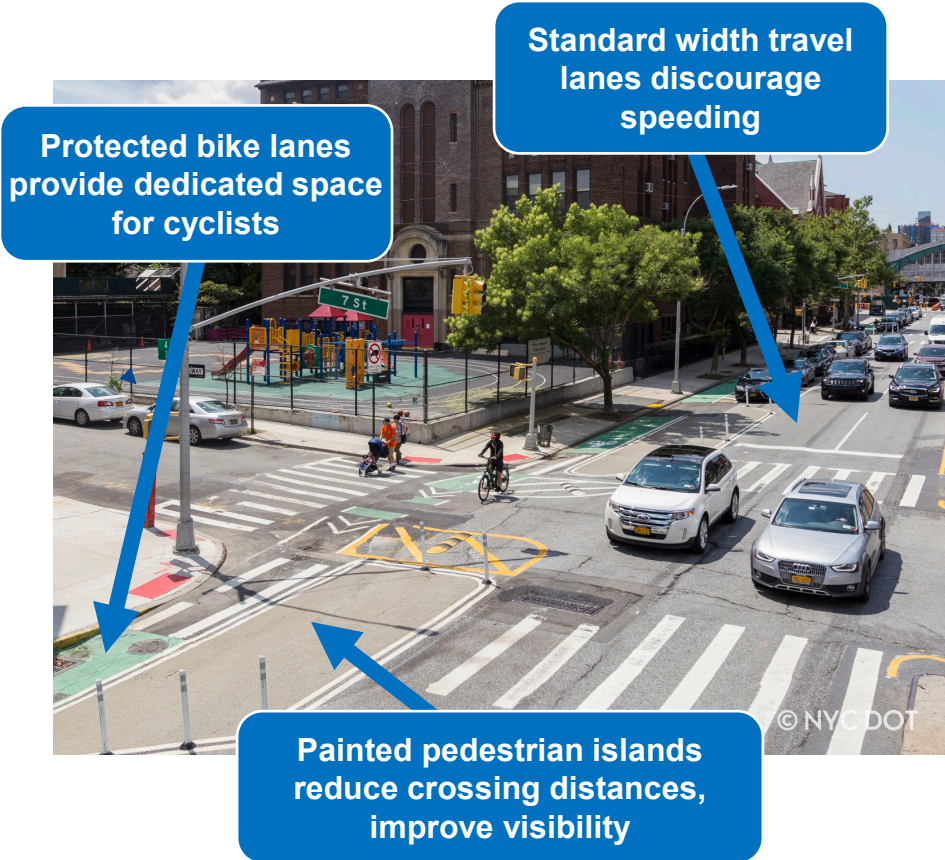


Turn Conflict Reduction

Toolkit: Protected Bike Lanes

Benefits

- **Most appropriate treatment in areas with commercial and industrial activity**
- **Maximizes traffic calming** by physically narrowing roadways
- **Increases safety for all road users** by shortening crossing distances for pedestrians, and separating people driving and biking
- Encourages **wider range of people** to try riding a bike

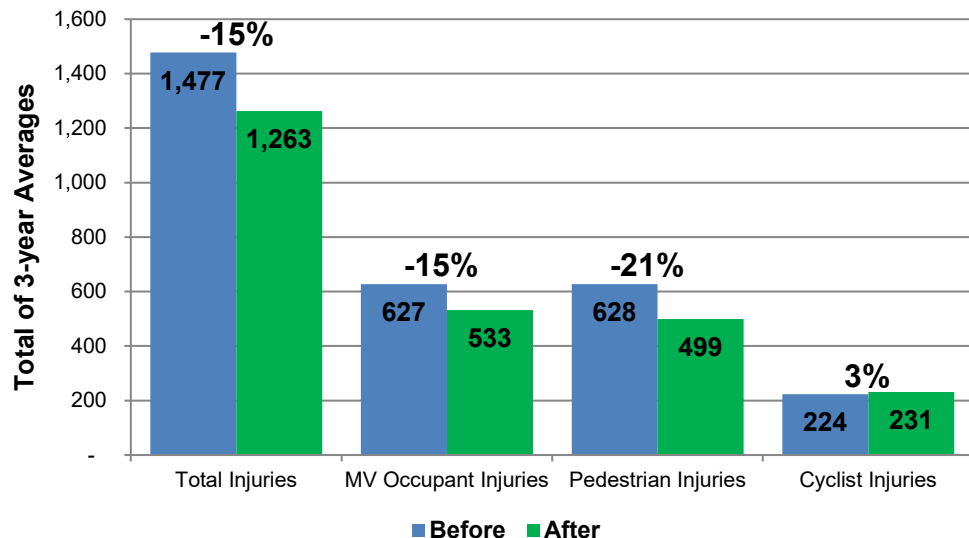


Safety Benefits of Protected Bicycle Lanes

Protected Bike Lanes designs are proven to calm traffic and improve safety for all road users

Protected Bike Lanes

Before and After Crash Data, 2007-2017



Data from 25 separate protected bicycle lane projects installed from 2007-2014 with 3 years of after data. Includes portions of 1 Ave, 2 Ave, 8 Ave, 9 Ave, Broadway, Columbus Ave, Hudson St, Lafayette St / 4 Ave, Sands St, Allen/Pike St, Kent Ave, Prospect Park West, Flushing Ave, Bruckner Blvd & Longfellow Ave, Imlay St / Conover St, Paerdegat Ave. Only sections of projects that included protected bike lanes were analyzed. Source: NYPD AIS/TAMS Crash Database

Protected bike lanes benefit all street users:

Crashes with Injuries

Down 15%

Motor Vehicle Occupant Injuries

Down 15%

Pedestrian Injuries

Down 21%



VISION ZERO

Multi-agency effort to reduce traffic fatalities and injuries

Pedestrian Safety and Older NYers (2022)

Key Findings:

- Seniors make up less than 15% of New York City's population, but over 45% of pedestrian fatalities

Protected Bike Lanes:






- On streets with protected bike lanes, seniors saw a **39% decrease in KSI and a 22% drop in overall injuries**. Non-senior adults saw a **24% drop in KSI and 9% drop in overall injuries**.
- Commonly-used road treatment benefits all adults, it especially improves conditions for seniors.**

Crash Analysis:

- About 90% of both senior and non-senior adult injuries occur at intersections; 72% of injury crashes occur at signalized intersections



Safety Treatment Effectiveness

Treatment Name & Safety Features	Senior Pedestrian Injuries	Senior Pedestrian KSI	Non-Senior Adult Pedestrian Injuries	Non-Senior Adult Pedestrian KSI
Protected Bike Lanes 	 22%	 39%	 9%	 24%

Toolkit: Geometric Constraints

What's the best way to make more space for all road users?



A. One-way Conversion

Example: Loring Ave, Brooklyn, 2017



B. Remove One Lane of Parking

Example: Vernon Blvd, Queens, 2013



C. Reduce Travel Lanes

Example: 111th St, Queens, 2017



Street Improvements in Industrial Areas



Kent Ave
Brooklyn
2008-2010



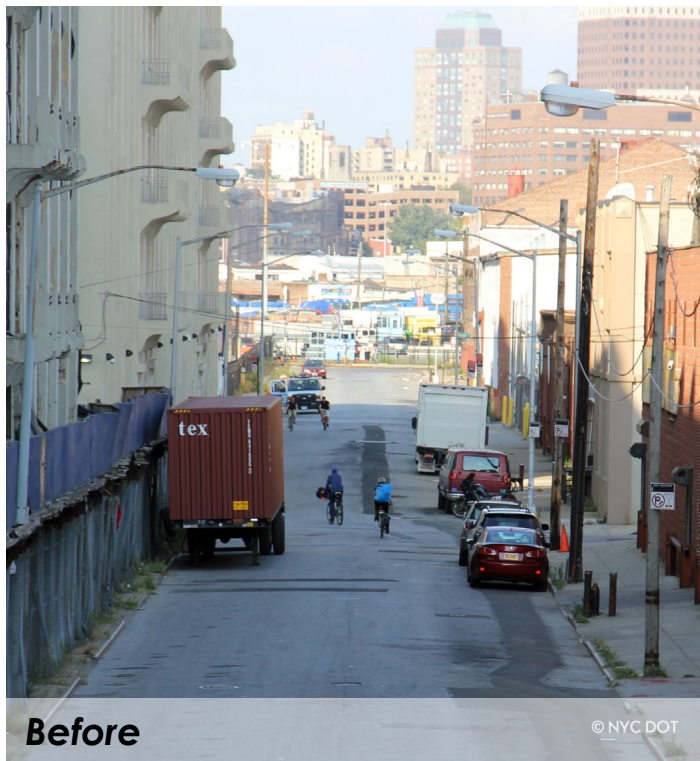
Street Improvements in Industrial Areas

St Ann's Ave
Bronx
2017



Street Improvements in Industrial Areas

Imlay St
Brooklyn
2013



Workshop Breakout Groups

5

Workshop Agenda

Breakout Groups to Discuss Issue Areas:

1. Grand Street (15 minutes)
2. Metropolitan Ave (15 minutes)
3. Morgan Ave (15 minutes)

Each group will then select a representative to share back at the end of the discussion. (15 minutes total)

Reminders:

- Keep discussion respectful, even if you disagree with a neighbor
- Be sure everyone at your table has a chance to speak

Share Back and Conclusion

6

Next Steps

Midterm

Follow-up Community Engagement

- *Share workshop feedback and study findings*
- *Present proposed street improvement project(s)*

Longterm

Implementation of proposed street improvement project(s)

Thank You!

Questions?



NYCDOT



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