



# 31<sup>st</sup> Ave, Astoria

Bike Network and Public Realm Planning

JUNE 2024



# Overview

## Background

- Project Area
- Past Work
- Safety & Crash Statistics
- Cycling in Numbers

## Community Vision

- Summary of Outreach
- What we heard
- Vision
- DOT's Toolbox
- Conceptual Proposal

## Proposed

- Existing Conditions
- Central Issues
- Proposal

## Open Street Operations

## Next Steps



Ydanis Rodriguez  
Commissioner



**ZOHRAN**



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QUEENS • BROOKLYN • MANHATTAN



**TIFFANY CABÁN**  
City Council Member, District 22



Assembly Member  
**JESSICA GONZÁLEZ-ROJAS**

# Overview

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## Requests

Community members and elected officials

2

## Vision

Safety, mobility, and public realm improvements

Community Engagement

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## Proposal

Community Vision + DOT's toolbox = Proposal

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## Implementation

Vision realized

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## Evaluation

Post-implementation monitoring, adjustments if necessary



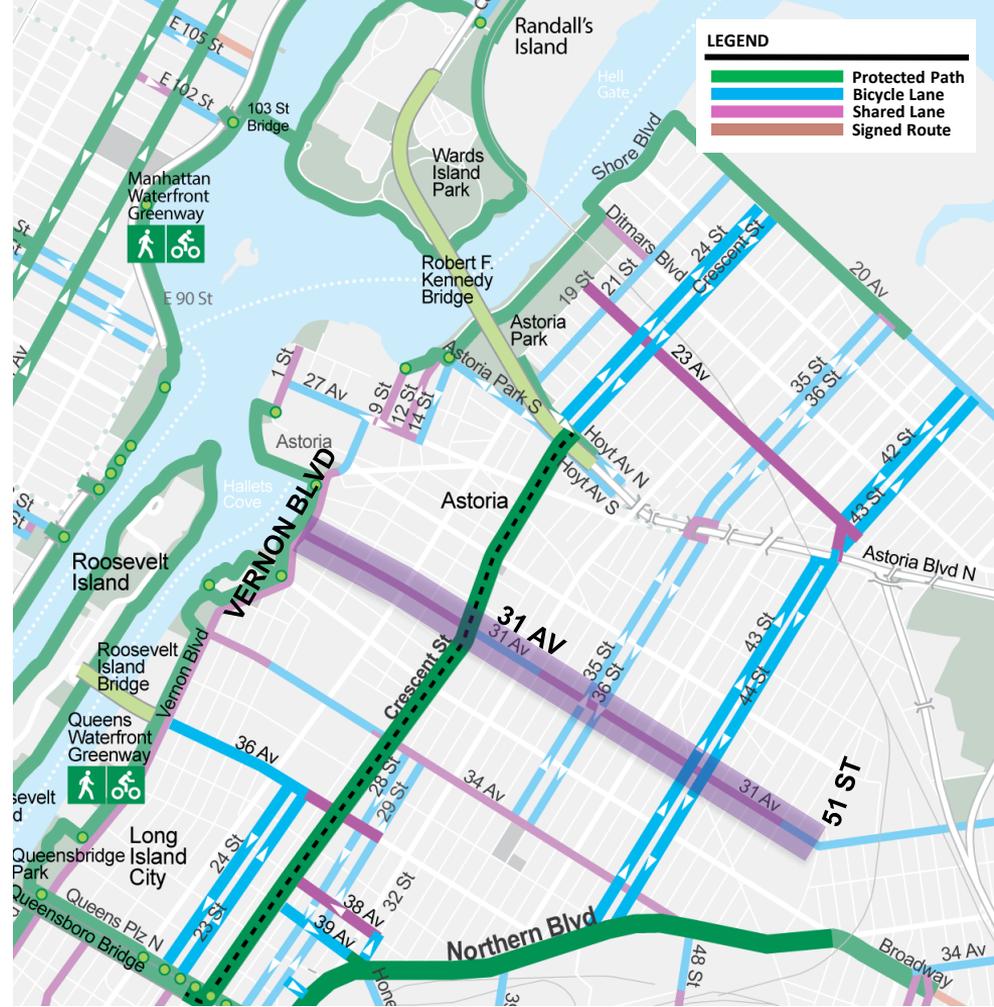
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# Background

# 1

# Project Area

- 31<sup>st</sup> Ave in Queens CB 1 is mostly residential with commercial uses
- **Vision Zero Priority Area**, High Youth Injuries, Sidewalk Width Deficiency
- Need for greater public realm amenities to add more open space
- No east-west protected bike lane facilities; blocked bike lanes
- Local truck and cut-through traffic (31<sup>st</sup> Ave is not a Truck Route)
- Curb access issues for commercial deliveries, visitors, and residents



# Past Improvements

## Public Realm and Bike Network Improvements:

### Painted Bike Corral:

- In coordination with the Art Program, DOT installed a curb extension on 31<sup>st</sup> Ave and 34<sup>th</sup> St featuring public art installation and bike parking

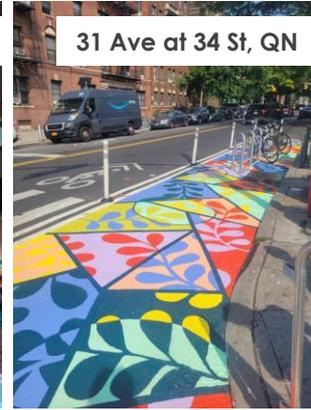
### Open Streets

- 2020: OS in partnership with 31<sup>st</sup> Ave Coalition
- Active on Saturday & Sundays, 12 PM – 8 PM

### Bike Lane Projects:

- **2021: Astoria Bike Network, Northern Blvd**
- **2020: Crescent St**
- 2017: Hoyt Ave N
- 2016: Shore Blvd, 20<sup>th</sup> Ave Upgrade, 31<sup>st</sup> Ave
- 2015: Vernon Blvd.

Since 2015, DOT has installed over **16.5 lane miles of protected bike lanes, and 21 lane miles of standard bike lanes and shared lanes** in the area.



# Safety and Crash Statistics

## Corridor Traffic Safety Report

### Vision Zero Priority Area

- 31<sup>st</sup> Ave at 21<sup>st</sup> St is a VZ Priority Intersection

**7** pedestrians severely injured

**2** cyclist severely injured

**1** cyclist killed (2019-May 2024)

8.9 killed or severely injured (KSI) per mile (2019-2023); **ranked Top 10% in Queens**

## 31<sup>st</sup> Ave, Vernon Blvd – 51<sup>st</sup> St

Injury Summary, 2019-2023 (5 Years)

Mode	Total Injuries	Severe Injuries	Fatalities	KSI
Pedestrian	58	7	0	7
Bicyclist	52	2	1	3
Motor Vehicle Occupant	120	5	0	5
Other Motorized	13	0	0	0
<b>Total</b>	<b>243</b>	<b>14</b>	<b>1</b>	<b>15</b>

Source: Fatalities: NYCDOT, Injuries: NYSDOT KSI "Persons Killed or Severely Injured. Please Note: Starting in 2019, the National Highway Safety Administration (NHTSA) mandated that all jurisdictions follow the Model Minimum Uniform Crash Criteria (MMUCC) 4th Edition guidelines for collecting Serious Injury crashes. They did this to standardize what data is being collected across the country. Accordingly, the New York State Department of Motor Vehicles (DMV) changed their definition of severe, "A"-type injuries. As a result of this change, some injuries not previously attributed to the serious injury classification are now included. This change has made data from that year difficult to compare to previous years. Any increase in severe injuries may reflect the change in the formula and not an actual change in the trend of severe injuries

# Safety and Crash Statistics

## Pedestrian Injuries

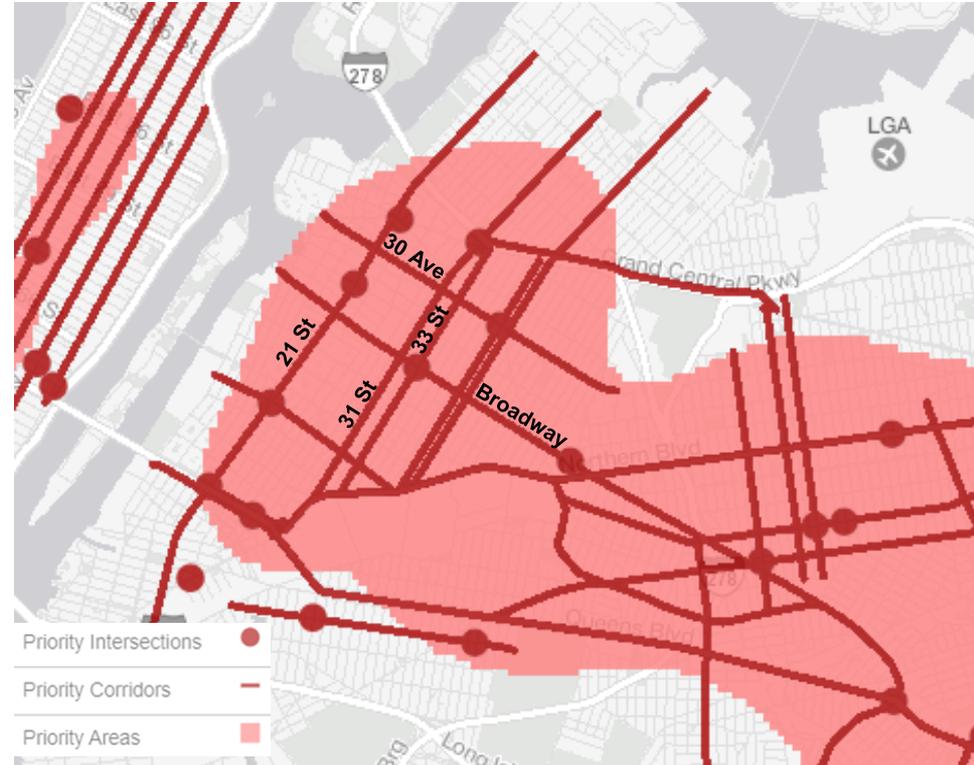
- 58 Injured, 7 Severely
- 26% Vulnerable Users (0-17, 64+ years old)
- 54% Crossing with Signal
- 24% Crossing Midblock

## Cyclist Injuries

- 52 injured, 2 Severely, 1 Fatality
- 21% of injuries; ~3% of NYC mode share
- 28% of injures caused by opening of car doors

## Motor Vehicle Occupants

- 120 injured, 5 Severely
- 30% of injuries are rear-end collisions
- 35% of injures occurred between 9PM and 6AM



# Cycling in Numbers

## Network Expansion

**1,550+**  
miles of bicycle facilities

**645+**  
of protected bike lanes

**32+**  
of protected bike lanes installed in 2023

## Daily Cycling

**2 million**  
approximately **30%** of adult New Yorkers ride a bicycle

**902,000**  
New Yorkers ride a bike regularly

**610,000**  
Commuting trips made by bike in NYC in 2022

## Bike Share

**34.6 million**  
Citi Bike trips taken in 2022

**160,000+**  
daily trips on busiest days

**15%**  
New Yorkers use Citi Bike (2018)

## Delivery Workers

**65,000**  
Estimated delivery workers in 2023

**94%**  
growth in daily cycling (2012-2022)



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# Community Vision & Goals

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# Summary of Outreach Conceptual Proposal

## Online Survey

(April – June 2023)



2,200+ responses; 92% of respondents lived in the area. Questions on people's ideas for improvements

## Five Pop-Up Workshops

(Summer, 2023)



Five pop-ups to gather additional feedback on safety and overall street improvements people would like to see realized

## Merchant Survey

(July 2023)



99 businesses surveyed along 31st Ave on questions related to loading, deliveries, and other business-related issues

## In-Person Workshop

(Sept. 2023)



More than 150 people attended the in-person workshop where DOT requested feedback on conceptual designs

# What We've Heard



## Survey: Most Frequently Mentioned Safety Concerns

- Vehicles disregard traffic signals (400+ responses)
- Lack of protected bike lanes (300+)
- Double parking for extended periods of time 250)
- Excessive vehicular speeding (180)
- Unsafe intersection crossings 150)

## Intersections with most comments:

1. Newtown Rd, 31 Ave and 43 St
2. Vernon Blvd and 31 Ave
3. 31 St and 31 Ave
4. Crescent St and 31 Ave
5. 33 St and 31 Ave



## Merchant Survey: Most Frequently Mentioned

- Lack of curb access for deliveries
- Delivery trucks double park on 31<sup>st</sup> Ave for extended periods
- Merchants have no control of delivery times
- Many businesses have cyclists deliver their goods
- Roadway is too narrow in its existing configuration

## Public Realm and Bike Network: Most Frequently Mentioned Improvements



Pedestrian Space &  
More Greenery



Street Seats, Public  
Art, and Community  
Programming



Protected Bike  
Lanes



Improved Curb  
Management

# Summary of Outreach **Proposed Redesign**

## **In-Person Open House**

(May. 2024)



Open House attendees shared their thoughts on proposal for neighborhood circulation, re-design that helps refine proposal

## **What We've Heard**

- Overwhelming support for proposed design elements which includes a one-way conversion of 31<sup>st</sup> Ave with traffic diverters
- Continued desire for robust pedestrian and cyclist infrastructure
- Requests:
  - Greenery along the corridor
  - Daylighting of intersections
  - Traffic calming along 33<sup>rd</sup> St, Newtown Rd, and intersections along Vernon Blvd

# Vision & Goals **Prioritize people on foot and on bikes**

- **Calm traffic** by reducing cut-through traffic while maintaining **neighborhood access**
- **Expand public spaces** that **supports community**, reinforces and support Open Street
- Expand the network by adding **bike facility that is comfortable for all ages and ability levels**



# Vision & Goals **Design Elements**



**Traffic Diverters**



**Bike Boulevards**



**Curb Management**



**Shared Street**



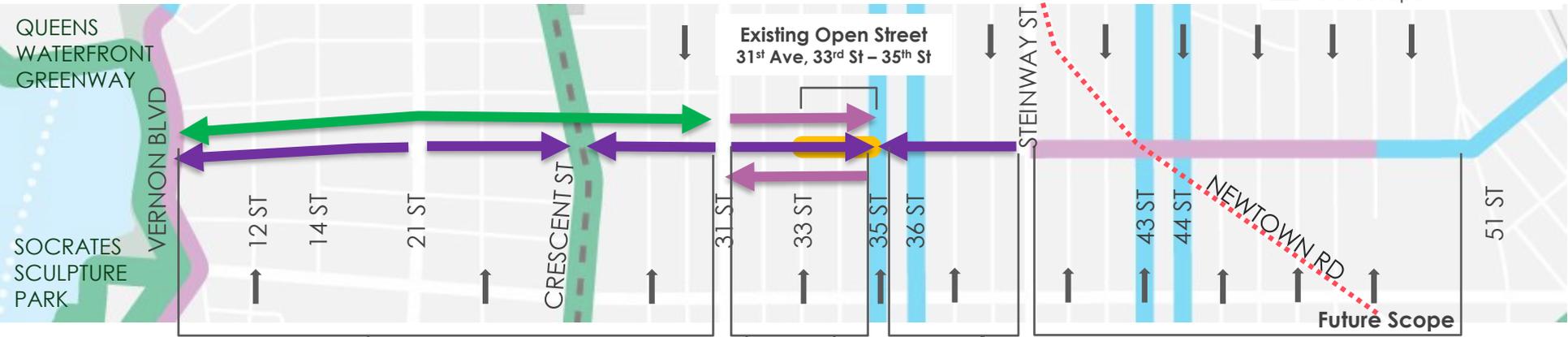
**Street Furniture & Greenery**



**Community Programming**

# Vision & Goals Concept

- █ Open Street
- █ Protected Bike Lane
- █ Conventional Bike Lane
- █ Shared Lane
- Direction of Vehicular Traffic
- █ Future Scope



**Typology: Crescent St**  
31st Ave, Vernon Blvd - 31st St



**Typology: Berry St**  
31st Ave, 31st St - 33rd St



**Typology: Broadway**  
31st Ave, 33rd - 35th St



**Typology: Crescent St**  
31st Ave, 36th St - Steinway St



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Proposal

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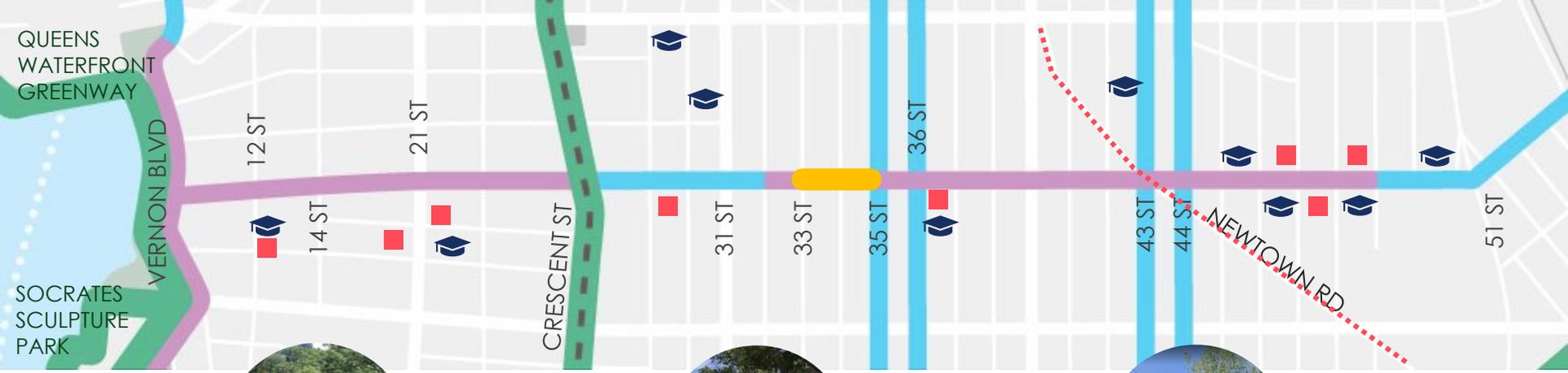
# Existing

- Open Street
- Protected Bike Lane
- Conventional Bike Lane
- Shared Lane
- Schools
- House of Worship

- 1** **Vernon Blvd - 30<sup>th</sup> St**
- Mostly residential area
  - Access to waterfront

- 2** **30<sup>th</sup> St - Steinway St**
- Commercial land uses
  - Open Street (Sat., Sun. 12-8 PM)

- 3** **Steinway St - 51<sup>st</sup> St**
- Residential; auto-oriented businesses; schools



**Major Destinations:**



**Vernon Blvd Waterfront Access**



**31<sup>st</sup> Ave Open Street, core commercial**



**Schools: P.S. 151, William Cullen Bryant HS**

# Central Issues

## Overlapping demands reveal stress along the corridor



Vision Zero Priority Area with high number of pedestrian injuries, long distances between crossings



Existing shared and conventional lanes often blocked by double parked vehicles



Illegal U-turns, speeding, cut-through traffic. Not a truck route

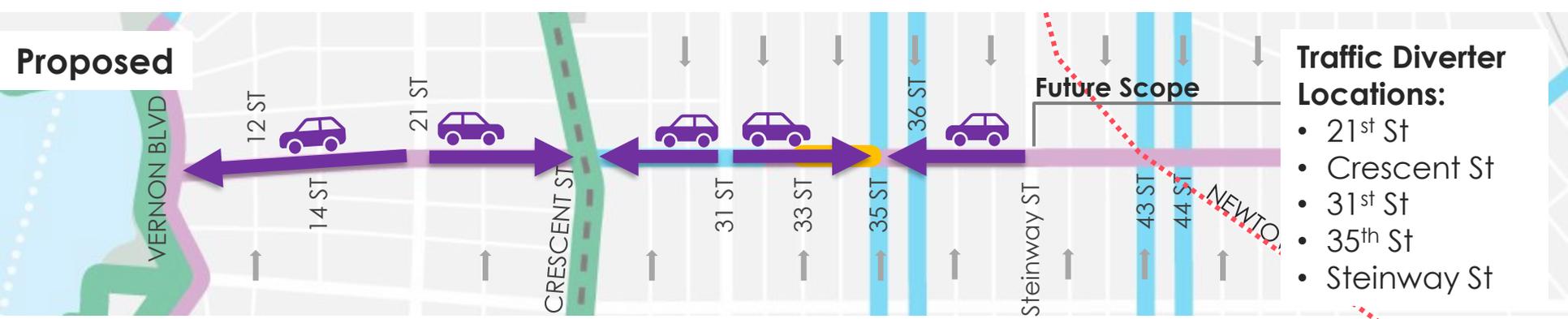
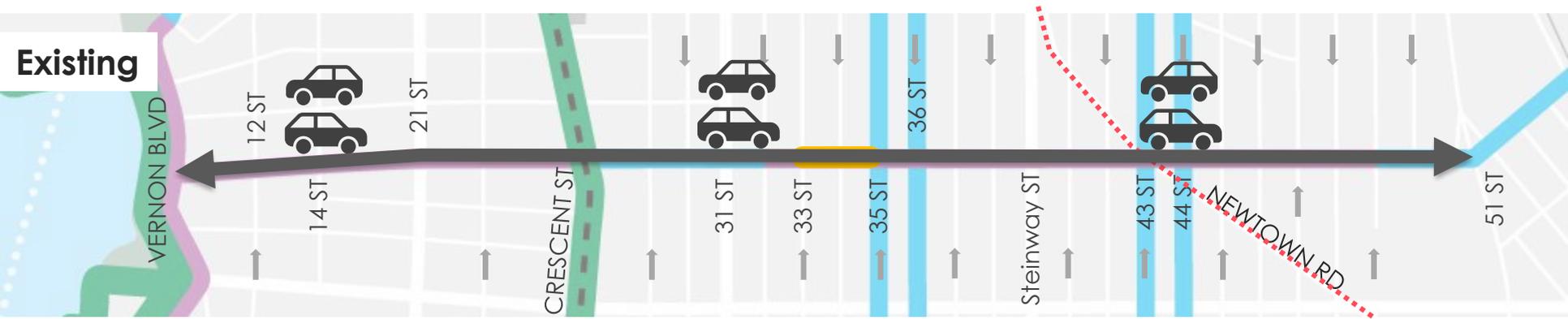


Chronic double parking, lack of loading spaces for residential and commercial deliveries



# Proposed Neighborhood Circulation

- Open Street
- Protected Bike Lane
- Conventional Bike Lane
- Shared Lane
- Direction of Vehicular Traffic
- Future Scope

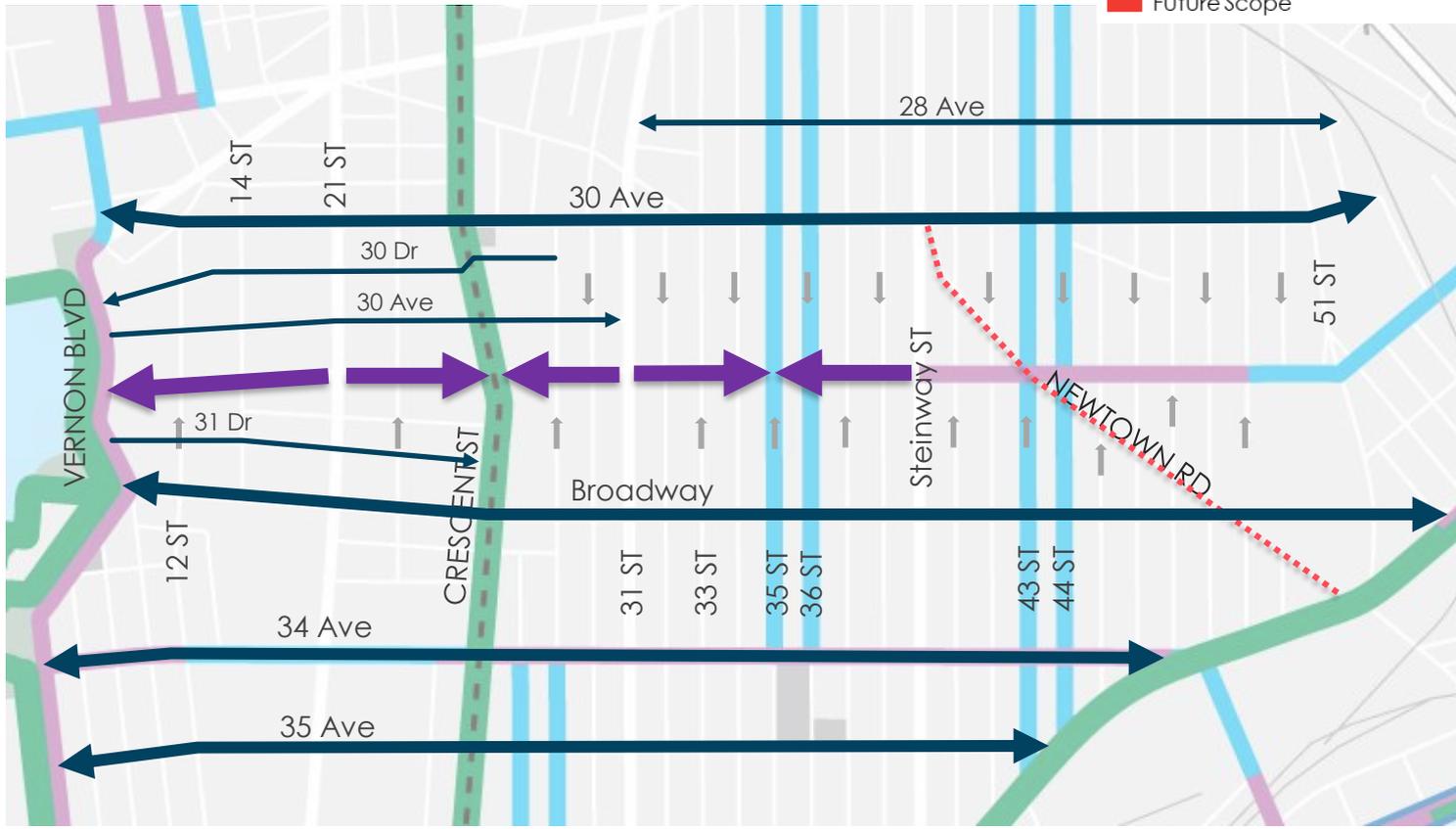


# Proposed Alternate Routes

- Open Street
- Protected Bike Lane
- Conventional Bike Lane
- Shared Lane
- Direction of Vehicular Traffic
- ⋯ Future Scope

## One-way Traffic Conversion with Diverters

- Reduces overall vehicular volumes by reducing cut-through traffic
- Maintain local vehicle access by allowing one-way travel for portion of the corridor



- Open Street
- Protected Bike Lane
- Conventional Bike Lane
- Shared Lane
- Direction of Vehicular Traffic
- Alternate Routes

# Proposed Vernon Blvd to 31st St, 35th St – Steinway St

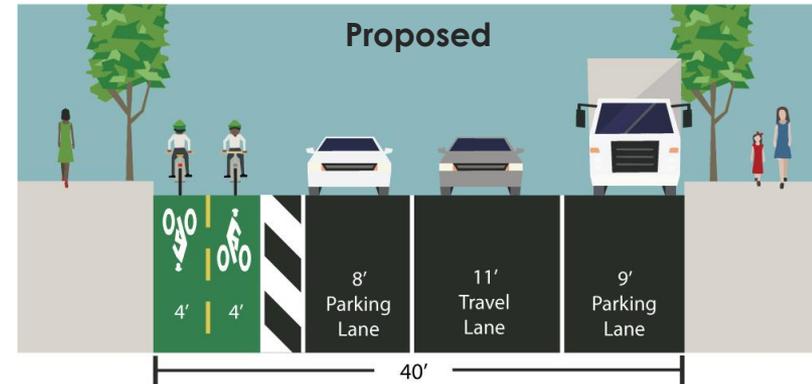
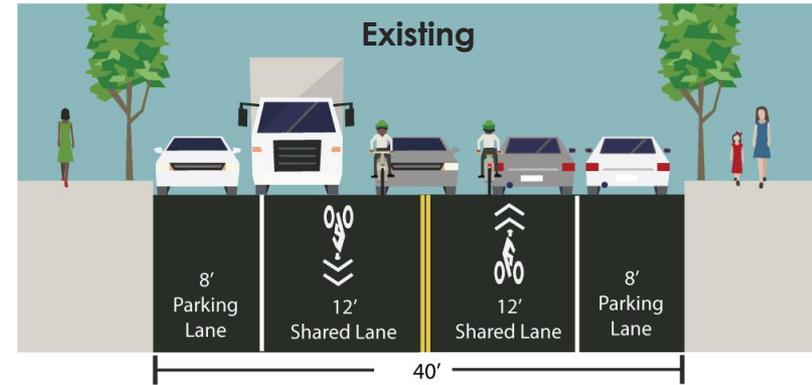


## Install Parking Protected Two-Way Bike Path

- North Curb: Vernon Blvd – 31<sup>st</sup> St
- South Curb: 35<sup>th</sup> St – Steinway St

## Re-design Intersections

- Gateway to waterfront greenway
- Safety improvements at key intersections
- New crossing opportunities along long blocks
- Daylighting, off-set crossings require the removal of parking at corners



# Proposed Two-way Protected Bike Path Design Elements



Left-turn Traffic Calming

Painted Pedestrian Islands, Daylighting



Two-way Parking Protected Cycling

Crescent St, Queens

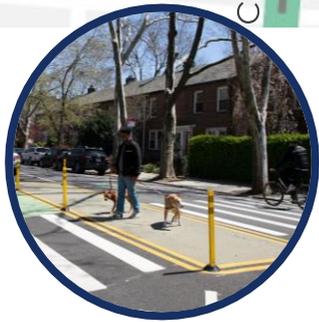
# Proposed Additional Treatments

## Traffic Diverters:

- 21<sup>st</sup> St
- Crescent St
- 31<sup>st</sup> St
- 35<sup>th</sup> St
- Steinway St



Signal Timing



Daylighting



Street Furniture



Wayfinding, Signage

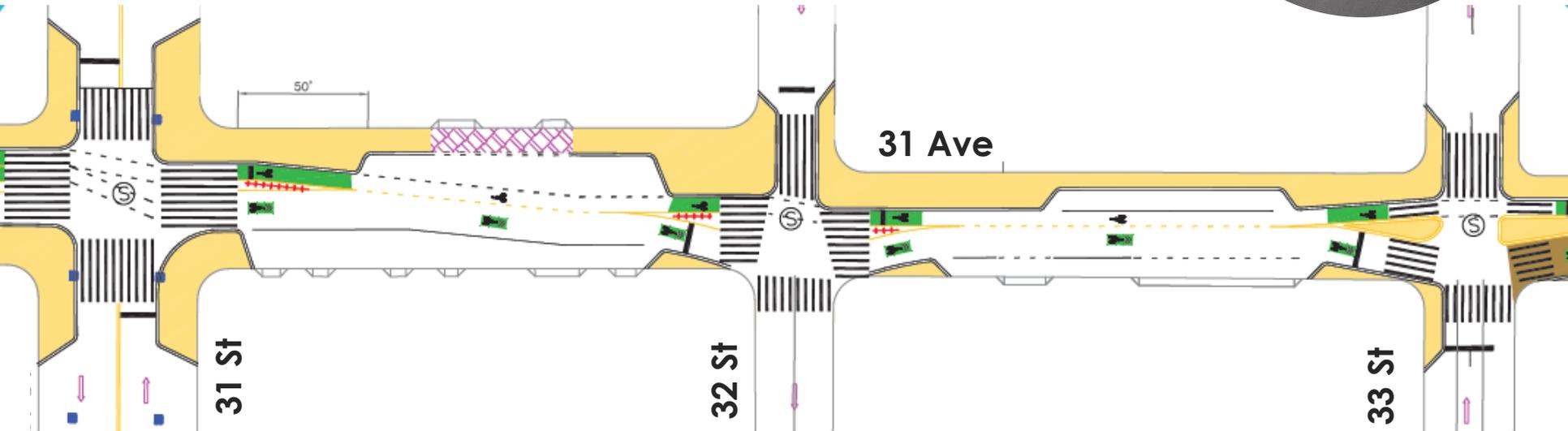
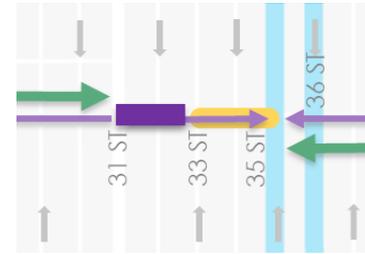


Curb Regulation

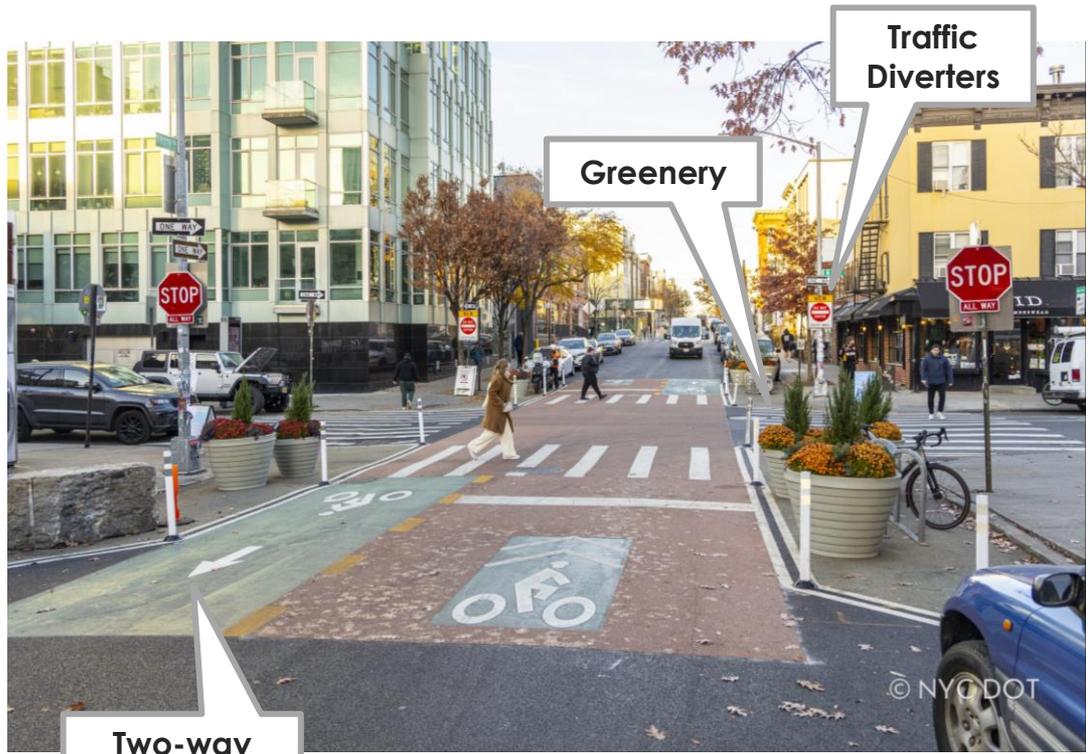
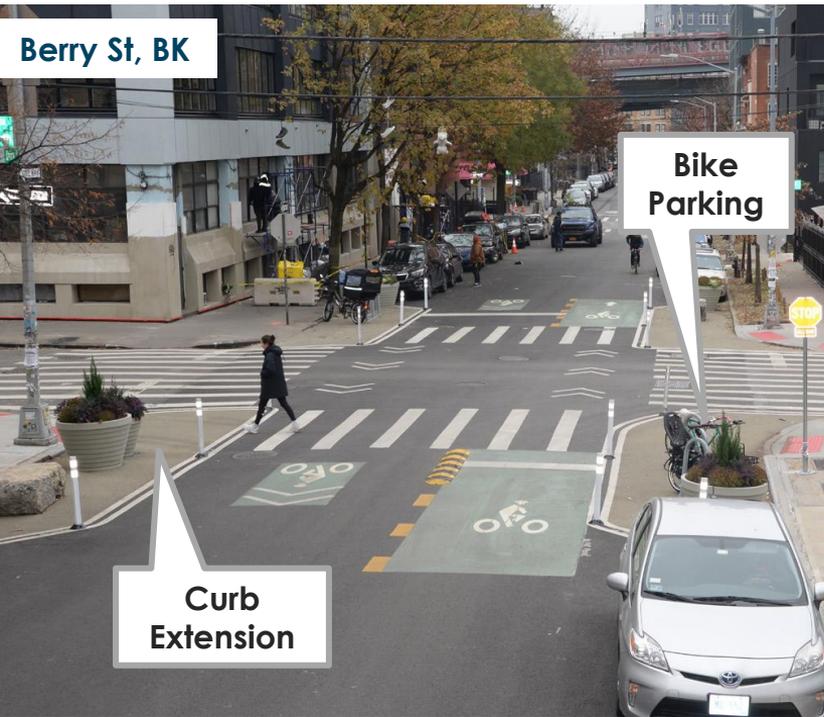
# Proposed 31<sup>st</sup> St – 33<sup>rd</sup> St

## Gateway to Open Street

- Eastbound contraflow bike lane, westbound shared lane
- Expanded pedestrian space



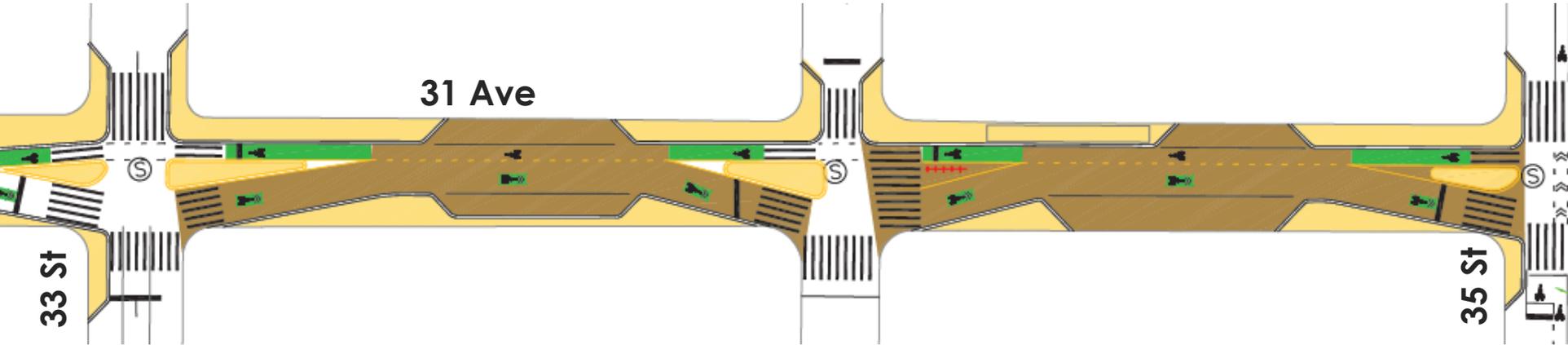
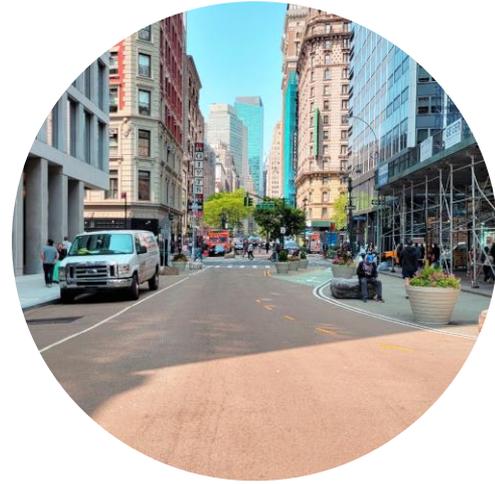
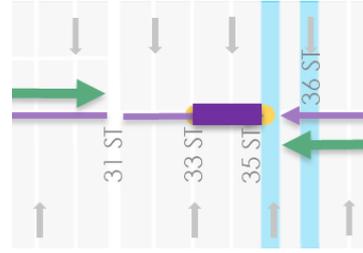
# Proposed Open Street Gateway Design Elements



# Proposed 33<sup>rd</sup> St – 35<sup>th</sup> St

## Shared Street

- Public Realm Core: Existing Open Street
- Expanded pedestrian space
- Chicanes to calm traffic



# Proposed Shared Streets Design Elements

Light Touch Materials

Broadway at 21<sup>st</sup> St, Flatiron

Planters

Roadway Epoxy Gravel Treatment

Flexible Delineators

Movable Furniture

Bike Parking



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# Open Street Operations

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# Open Streets

- Transforms streets into public spaces open to all
- Permanent program per 2021 legislation
- DOT required to evolve successful sites as shared streets, plazas, bike boulevards, etc.

## 31<sup>st</sup> Ave (33<sup>rd</sup> St – 35<sup>th</sup> St) Open Street

- Active on Saturday & Sundays, from 12 PM – 8 PM
- Maintenance and operational support by DOT and the Horticultural Society of New York

### Community Partner:

**31<sup>st</sup> Ave Open Streets Collective**, a community-based organization manages the Open Street providing safe space for outdoor dining, community events, markets, and other activities

- Learn more at the Collective official website:
  - [www.31staveopenstreet.org](http://www.31staveopenstreet.org)



# Open Street Programming



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## Next Steps

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# Next Steps

## May/June:

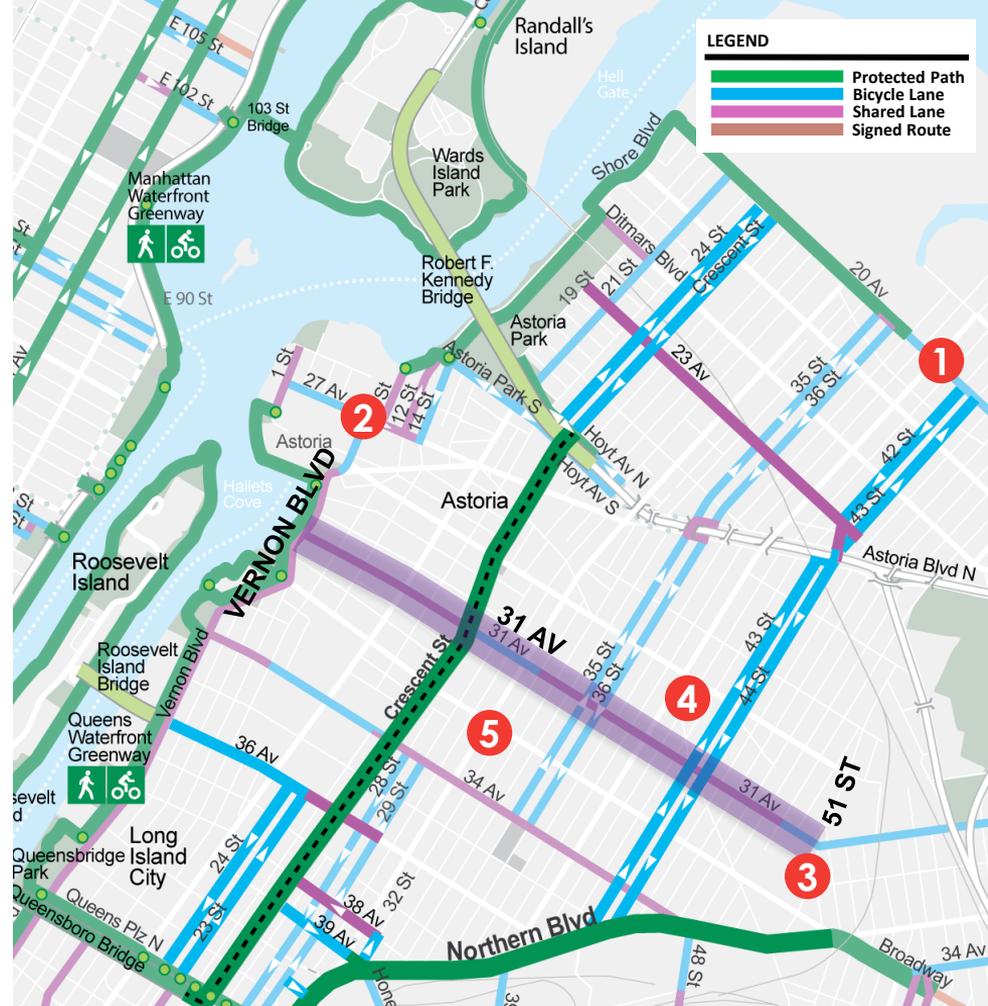
- ✓ Open House
- QN Community Board 1

## Summer/Fall:

- Phase I Project Implementation
- Phase II Outreach, Development

## Future:

- Continued Outreach for Phase II
- Potential Future Projects:
  1. Astoria Heights, Queens Waterfront Greenway
  2. Astoria Park Bike Blvd
  3. 51<sup>st</sup> St Traffic Calming
  4. Newtown Rd Traffic Calming
  5. 31<sup>st</sup> St Under the El Bus Stop Upgrades



# Thank You!



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