## **KINGSLAND AVENUE AND MONITOR STREET** PROTECTED AND STANDARD BIKE LANES

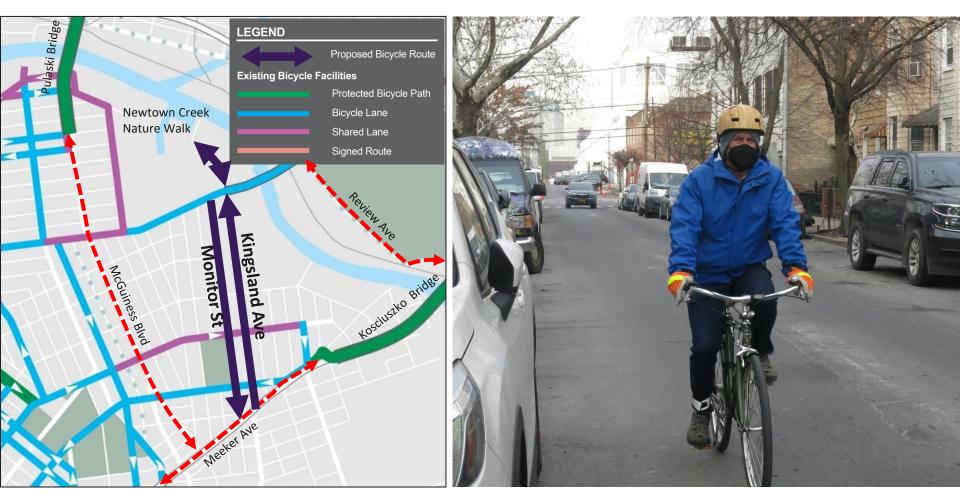
Presented to Brooklyn Community Board 1 Transportation Committee

May 23, 2022





## **Project Area Location**



- Buffered bike lane on Greenpoint Ave Bridge, protected bike lane on Pulaski Bridge, bike route on Greenpoint Ave
- Meeker Ave bike and ped path underway
- McGuinness Blvd planning

## Background

- Newtown Creek Nature Walk Phase 3
  - Opened in 2021
  - Access on Kingsland Ave
  - Request from Newtown Creek Alliance to add bike connections
- Area work includes:
  - Buffered bike lane on Greenpoint Ave Bridge, Protected bike lane on Pulaski Bridge, Bike lane on Greenpoint Ave
  - Meeker Ave bike and ped path development
  - o McGuinness Blvd safety planning
- Kingsland Ave is a truck route from Norman Ave to Greenpoint Ave
- No North/South bike connections through eastern Greenpoint





### **Newtown Creek Nature Walk**

## **Issues Kingsland Ave Industrial Uses**

- Trucks and heavy vehicles can cause added risk for pedestrians and people riding bikes
- It is necessary to safely accommodate industrial operations
- Lack of street markings leads to unpredictable movements





## **Issues Kingsland Ave Illegal Truck Storage**

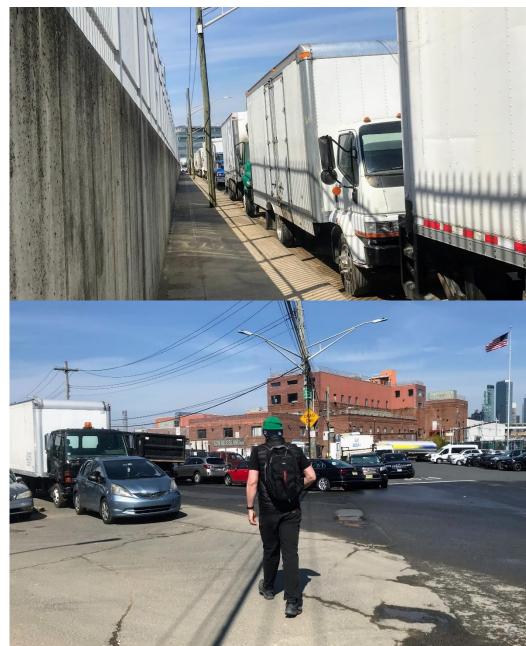
- Lack of parking regulations contributes to long-term vehicle storage
- Parking for visitors and employees is taken by illegally parked vehicles





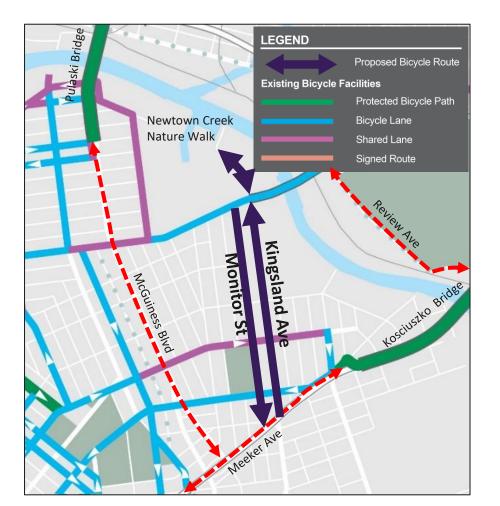
## **Issues Kingsland Ave Pedestrian Access**

- Intersections lack crosswalks and pedestrian ramps
- Pedestrian crossings are frequently blocked by vehicles
- Wide intersections permit unpredictable vehicle movements
- South sidewalk of Kingsland Ave is 8 feet wide with only 5 feet clear
- Trucks parked along south sidewalk block street lighting and create unsafe feeling passage



## **Issues North-South Bicycle Connections**

- There are a number of east-west connections through Greenpoint, but few existing north-south routes
- Planned improvements on Meeker Ave, McGuinness Blvd, and Review Ave





## **Project Area Safety**

## Kingsland Avenue and Monitor St Crash History 2015-2019

	Total Injuries	Severe Injuries	Fatalities	KSI
Pedestrian	9	2	0	2
Bicyclists	13	0	0	0
Motor Vehicle Occupant	60	9	0	9
Total	82	11	0	11

• 6.2 Killed or Severely Injured (KSI) per mile puts the corridor in the middle 33% of dangerous corridors in Brooklyn



## **SAFETY – Protected Bike Lanes**

# Street designs that include protected bike lanes increase safety for all users

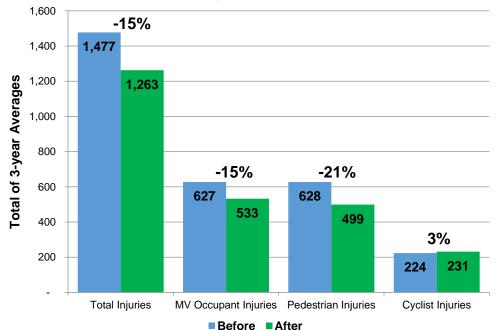
# -15% drop in all crashes with injuries -21% drop in pedestrian injuries

on streets where protected bike lanes were installed 2007-2017

Injuries to cyclists increase only 3%, despite a **61% bike volume increase** 

#### **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

## Green Wave: A Plan for Cycling in New York City



#### Analysis of fatalities key factors (2014-Present):

- **60% of fatalities happened at intersections**; 23% involved a vehicle turn; 16% involved a driver's failure to yield the right of way
- Nearly 90% of fatalities happened on streets without bike lanes

#### Citywide Protected Bicycle Lane (PBL) Network

**Build 30 miles of protected bicycle lane annually**, guided by a PBL vision document.

#### **Better Design:**

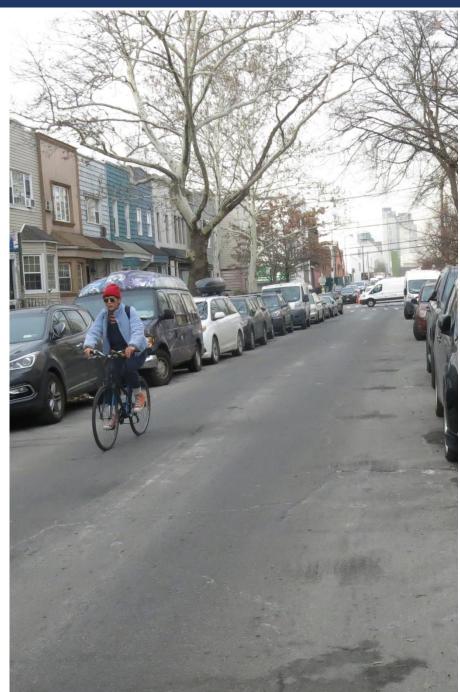
- Implement **new design** standards based on national & international best practices **to enhance safety at intersections.**
- Continue piloting new designs with rigorous safety analysis

#### Education and Outreach:

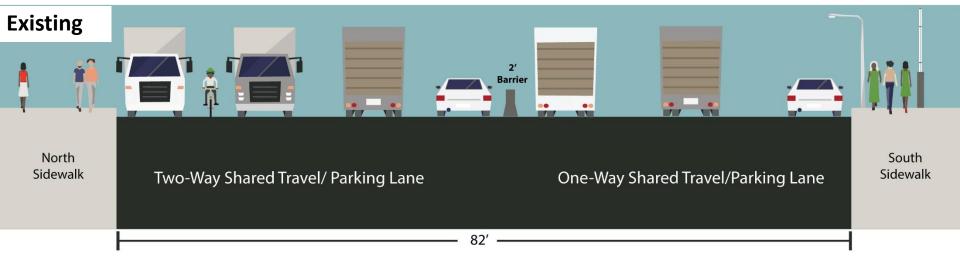
- Launch next phase of Vision Zero public awareness campaign, educating drivers with a focus on cyclist safety — and expand the "Get There" bicycle encouragement/rules of the road campaign
- Educate all street users about safe truck operation on city streets
- Increase helmet giveaways and helmet use encouragement.

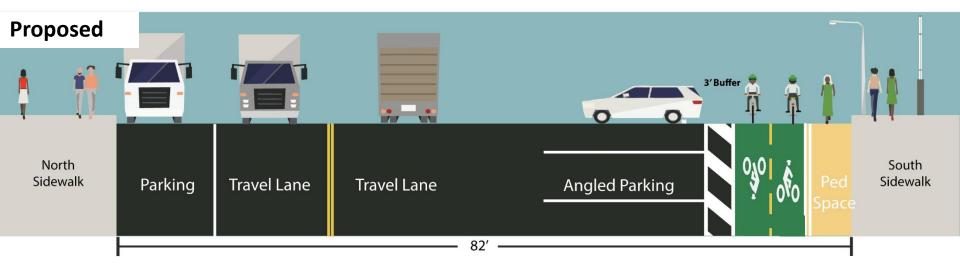
## **Proposed Design Goals**

- Improve pedestrian experience between Greenpoint Ave and Newtown Creek Walk
  - Expand pedestrian spaces
  - Shorten pedestrian crossing distances
- Develop north/south bike connections
  - Provide protected space for people biking
  - Add new dedicated spaces for biking
- Configure Kingsland Ave parking to optimize for passenger vehicles
  - Eliminate opportunities for illegal vehicle storage
  - Size spaces for passenger vehicles
- Maintain motor vehicle circulation



## Proposed Design Kingsland Ave, 82' Street Width, North of Greenpoint Ave





- Protected bike lane connects to Newtown Nature Walk
- New pedestrian space improves walking experience of narrow sidewalk
- Angled parking increases number of parking spaces by up to 20 spaces
- Wide moving lanes maintain flexibility for industrial operations

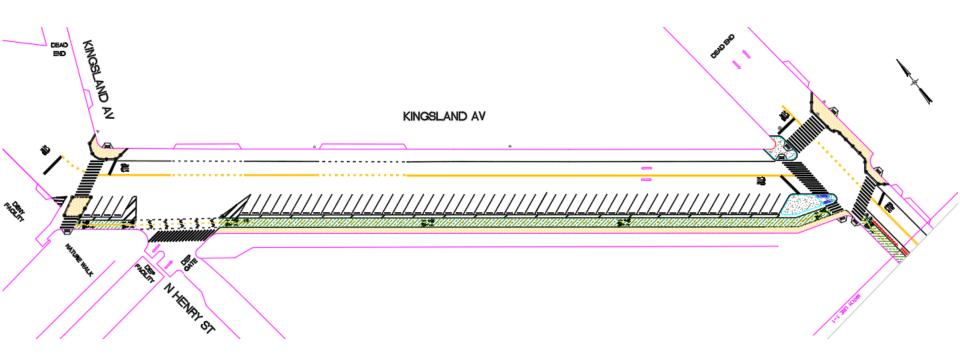
Proposed Design Kingsland Ave, 82' Street Width, North of Greenpoint Ave



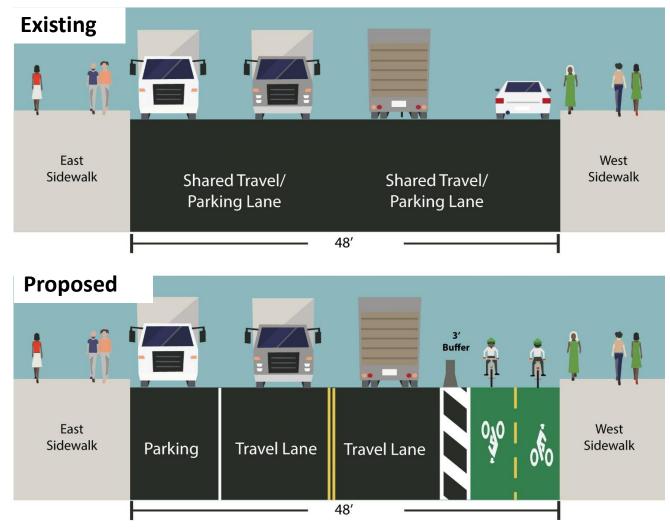
Proposed Configuration: Paerdegat Ave, Brooklyn



## Proposed Design Kingsland Ave, 82' Street Width, North of Greenpoint Ave

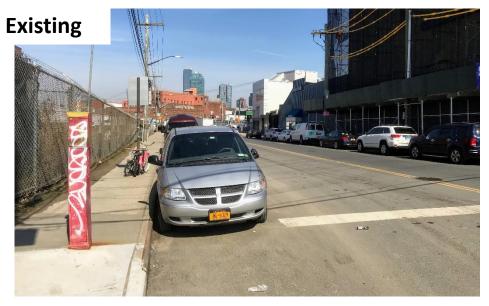


## Proposed Design Kingsland Ave, 48' Street Width, North of Greenpoint Ave



- Protected bike lane connects to Greenpoint Ave
- ~12 parking spaces converted on west curb
- Wide parking and moving lanes accommodates truck movements

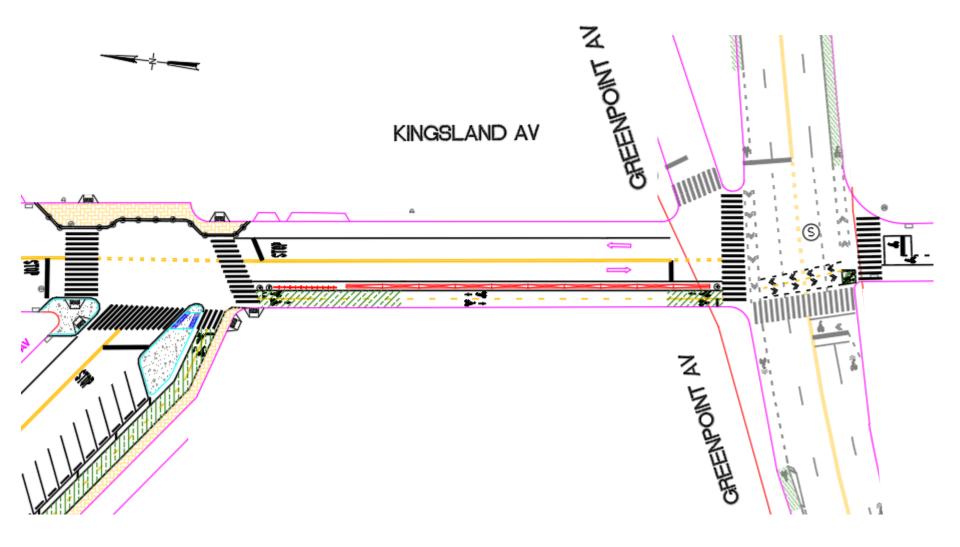
Proposed Design Kingsland Ave, 48' Street Width, North of Greenpoint Ave



## Proposed: Chrystie St, Manhattan

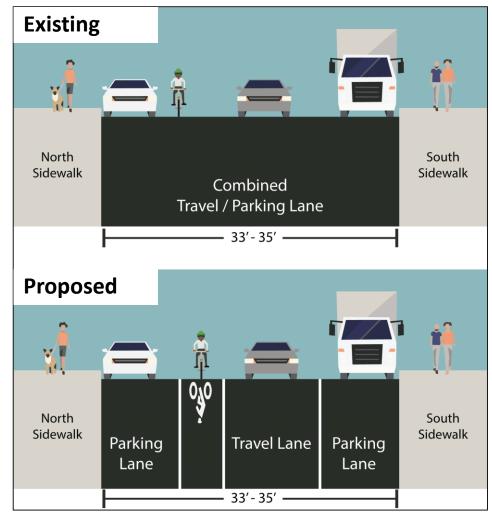


## Proposed Design Kingsland Ave, 48' Street Width, North of Greenpoint Ave



## **Proposed Design:**

Kingsland Ave and Monitor St – Greenpoint Ave to Meeker Ave



- Maintains traffic capacity
- No impact to parking

## **Proposed Design:**

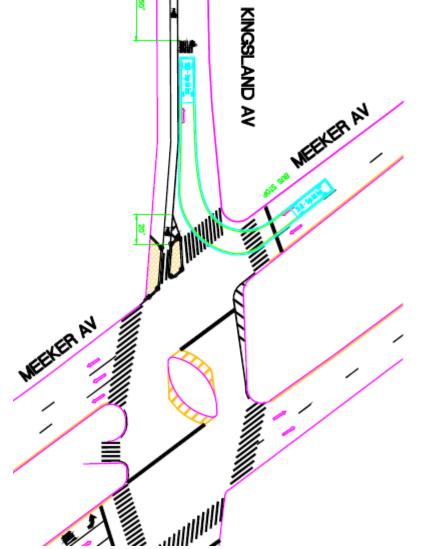
Kingsland Ave and Monitor St – Greenpoint Ave to Meeker Ave



## **Proposed Design: Kingsland Ave at Meeker Ave**



- Excess width at intersection:
  - Increased crossing distance
  - Unpredictable traffic movements
- Normalizing intersection provides opportunities for additional pedestrian space



## **Summary Project Benefits**

#### Protected bike lanes benefit all street users:

Crashes with	Motor Vehicle	Pedestrian Injuries	
Injuries	Occupant Injuries	Down 21%	
Down 15%	Down 15%		

- Creates north-south bike connections in neighborhood with few other options
- Increases pedestrian safety by shortening crossing distances
- Increases pedestrian space approaching Newtown Creek Nature Walk
- Preventing illegal truck parking increases available parking for employees and visitors to northern Kingsland Ave
- Maintains traffic capacity

