



Brooklyn CB 17

BICYCLE NETWORK DEVELOPMENT

Introductory Presentation

Presented to Brooklyn Community Board 17 – December 8, 2020



Presentation Agenda

1. Introduction to NYC DOT
2. CB17 Bicycle Network Development
3. Next Steps

Introduction

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Introduction to NYC DOT

Safe, efficient, and environmentally responsible movement of people and goods on the City's streets



NYC DOT is responsible for:

- 6,000 miles of streets and highways
- 789 bridges and tunnels
- 12,000 miles of sidewalk
- 12,700 signalized intersections
- 315,000 street lights
- Staten Island Ferry
- 1 million+ street signs
- 200 million+ linear feet of roadway markings

DOT Street Improvement Programs Toolkit

Markings Organize the Roadway to Increase Safety

High Visibility Crosswalks



Curb Extensions



Bike Lanes



Street Improvement Projects are:

- Low cost;
- Quickly implemented; and
- Use semi-permanent materials

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

Shared Bicycle Lanes

Benefits

Alert drivers and cyclists of shared space

Provide wayfinding for people on bikes

Guide cyclists away from open car doors

Considerations

Can be **less comfortable** for novice cyclists, may have less traffic calming benefits

No parking loss: typically fits in between existing travel and parking lanes



Conventional Bicycle Lanes

Benefits

Discourage speeding by visually narrowing the road

Increase predictability by clearly defining road space for each user

Considerations

No physical separation between vehicles and cyclists

No parking loss - typically fits in between existing travel and parking lanes



Protected Bicycle Lanes

Benefits

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

Considerations

Typically removes parking spaces

May require removal of a travel lane



Safety Benefits of Bicycle Infrastructure

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

-15% drop in all crashes with injuries

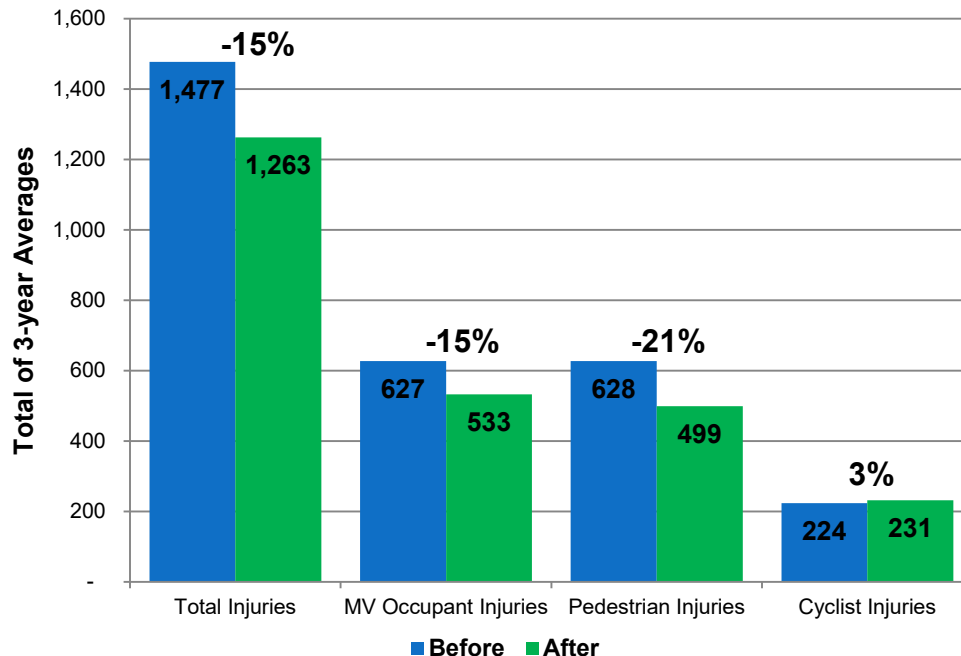
-21% drop in pedestrian injuries

on streets where protected bike lanes were installed 2007-2017

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

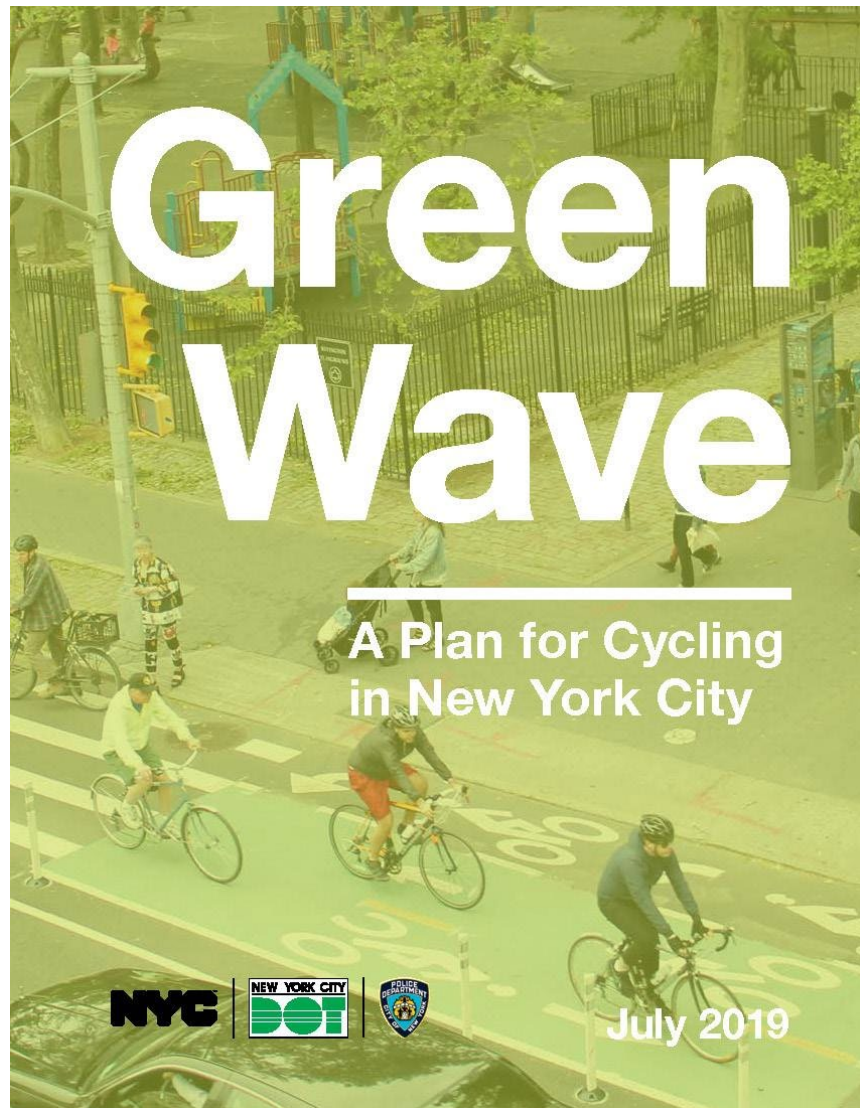
Protected Bike Lanes

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

Planning Context: Green Wave Plan



Citywide Protected Bike Lane Network

- Build **30 miles of protected bicycle lane** annually
- Build **75 miles of bicycle infrastructure** in **10 Bicycle Priority Districts** (7 in Brooklyn, 3 in Queens) by 2022

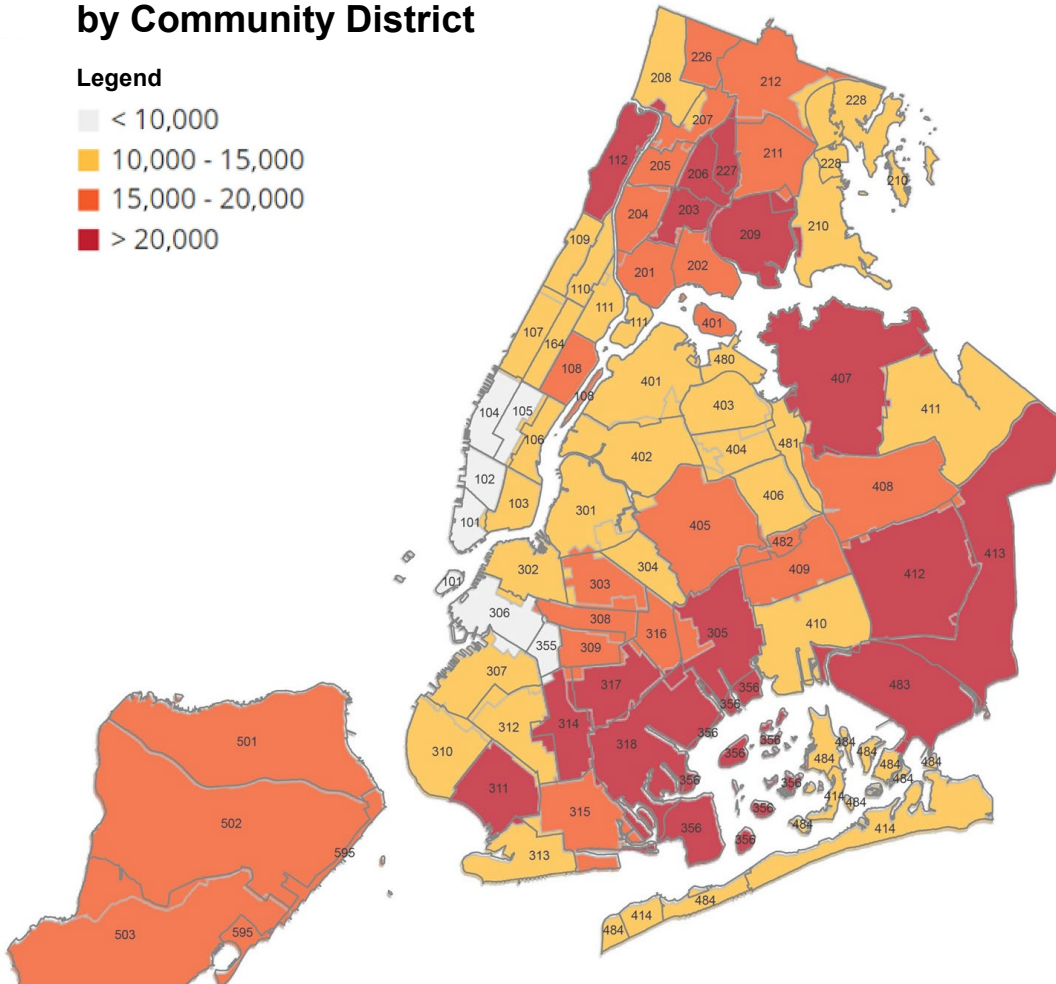
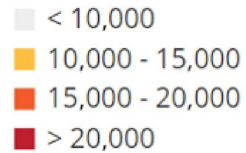
Improving Safety and Access in District

- **CB17 identified as Priority Bicycle District** due to high number of bicyclists Killed or Seriously Injured (KSI) and low bicycle network coverage
- Green Wave Plan envisions connecting district to protected bike lane network

Planning Context: Pandemic Response

Essential Workers by Community District

Legend



Improve Safe Commuting Options for Essential Workers

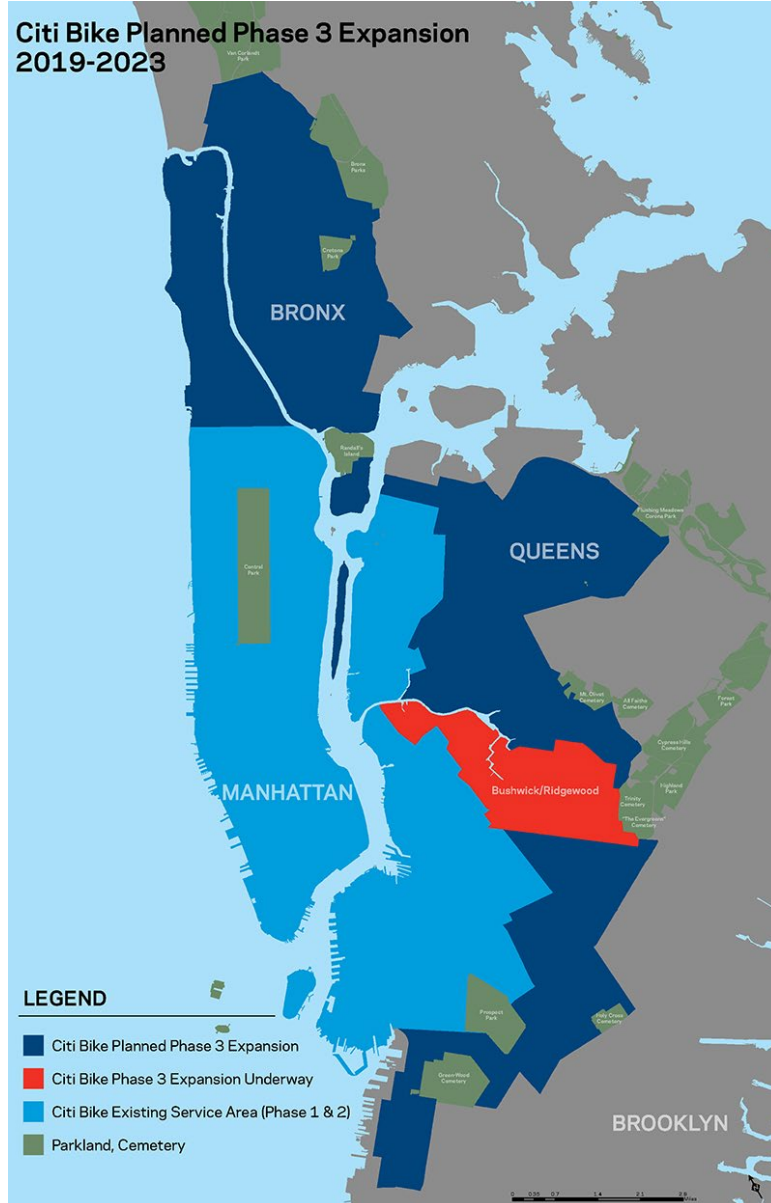
- High population of essential workers within district (over 20k workers)
- District home to two hospitals

Increase Access to Open Space in Hardest Hit Communities

- Improve connections to open space for socially distanced recreation
- Develop healthy commuting options that parallel transit to reduce crowding on public transportation

Source: Office of the New York City Comptroller

Planning Context: Citi Bike Expansion



District Included in Phase 3 Expansion

- Expansion plan includes district north of Cortelyou Road
- Phase 3 will be rolled out through 2023

Community Benefits

- Access to a network of over 15,000 bikes and 1,000 stations in Brooklyn, Queens, Manhattan and the Bronx
- Affordable membership rates with reduced fares for NYCHA residents and SNAP recipients



Bicycle Network Development

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Project Focus Area

Issues

- Existing bike network is small; lacks coverage and connectivity
- Nearest protected bike routes outside of district
- Speeding vehicles along neighborhood streets

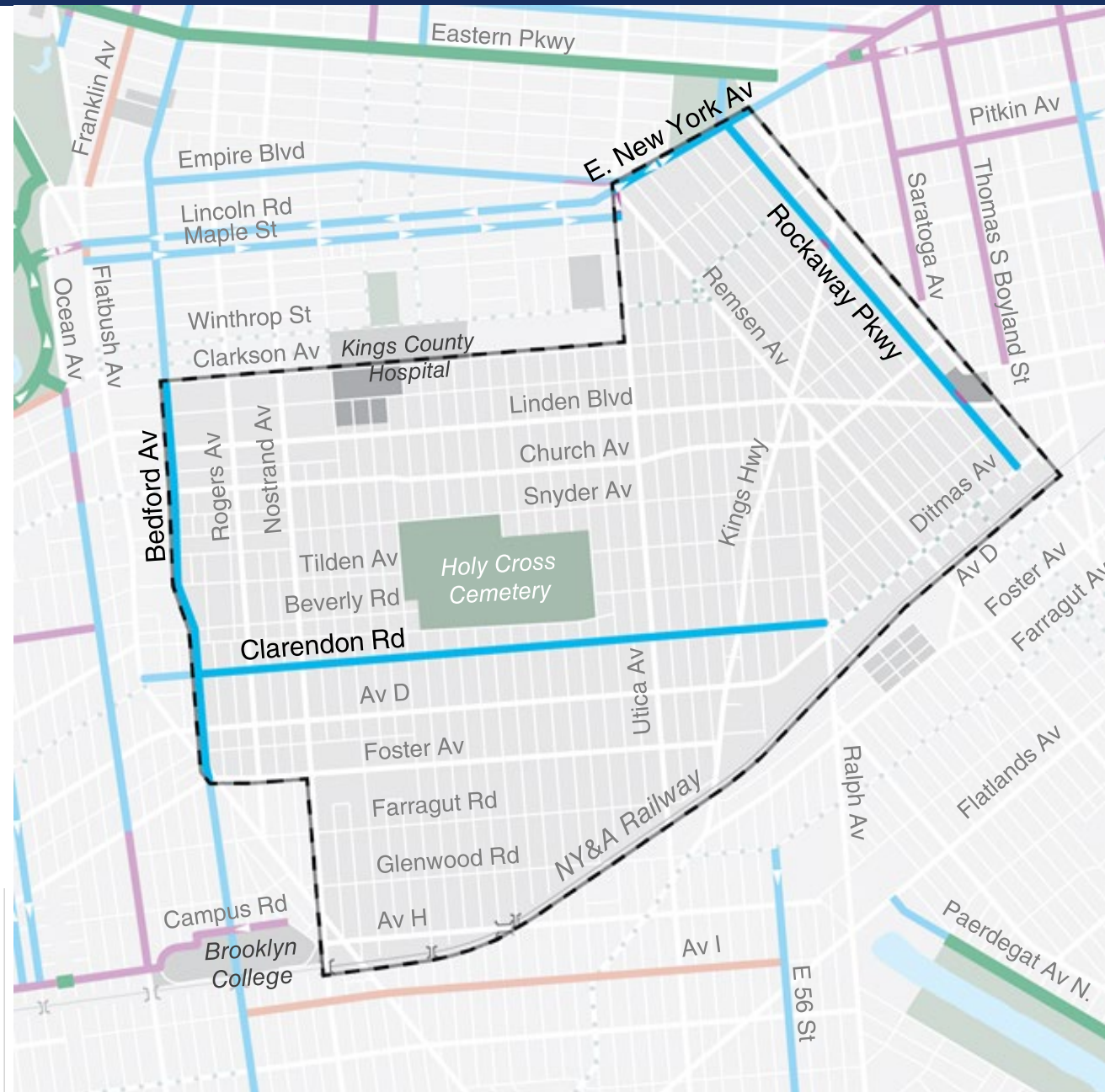
Street Network Challenges

- High-traffic thoroughfares with complex intersections
- Few opportunities to cross major streets and train tracks

LEGEND

Existing Bicycle Facilities

	Protected Path
	Bicycle Lane
	Shared Lane
	Signed Route



Major Recreational Destinations Surrounding District



Project Focus Area

Network Development Goals

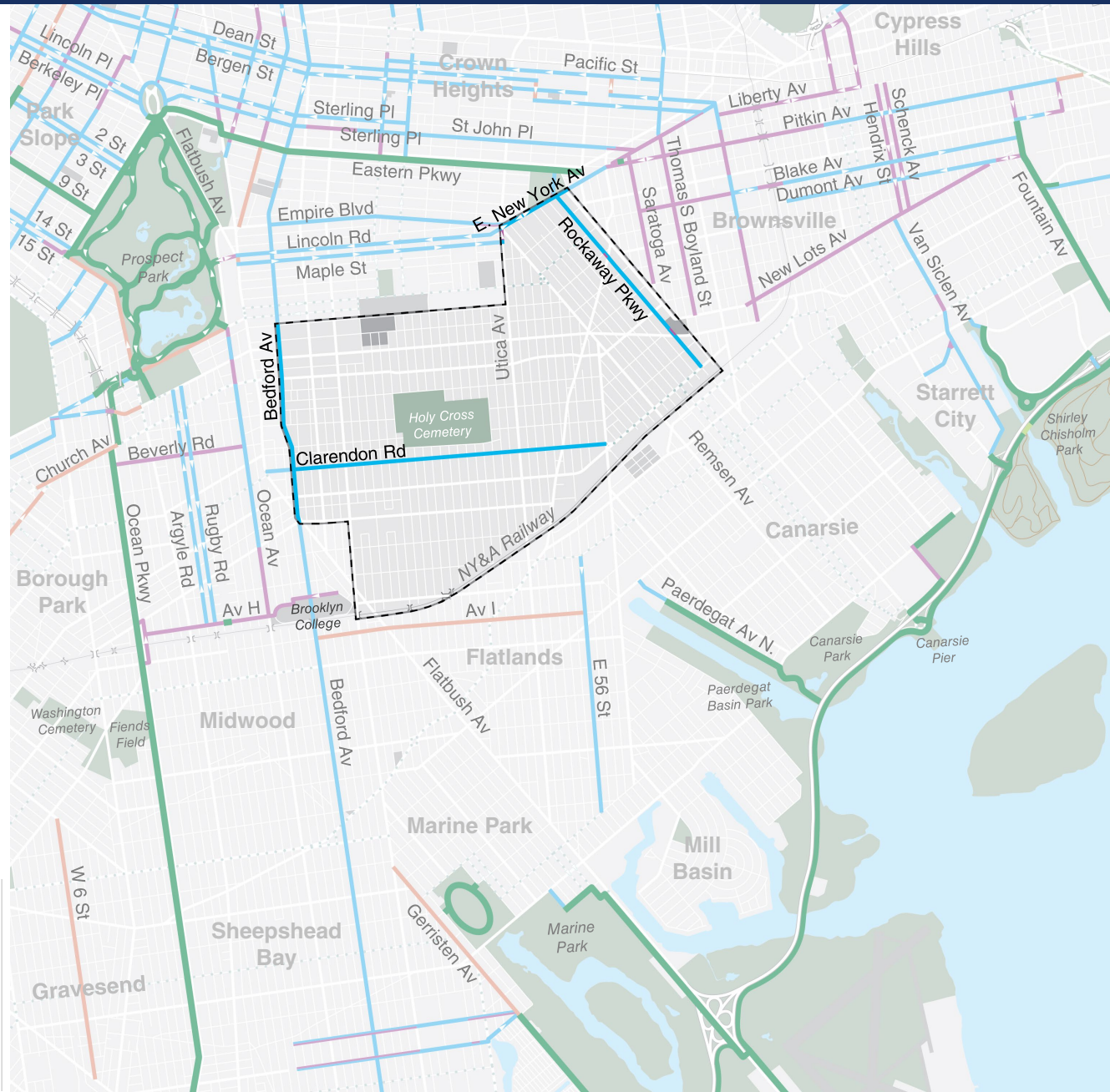
Improve safety for all road users

Close gaps in bicycle network

- Connections to local destinations and transit
- Connections to adjacent neighborhoods
- Connections to parks and greenways

LEGEND

Existing Bicycle Facilities	
	Protected Path
	Bicycle Lane
	Shared Lane
	Signed Route



Next Steps

3

Next Steps: Potential Timeline

Winter 2021

- Proposed Bike Forum - Virtual Workshop
 - Gather feedback for future engagement
 - Ideas for bike network development

Spring 2021

- Continue Public Engagement
- Project Development
 - Design and engineering
 - Return to board with project proposals

Summer - Fall 2021

- Project Implementation



Questions?
THANK YOU!



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