



Brooklyn Community Board 14

Bike Network Expansion

June 6, 2023

Presentation Overview

1. Background
 1. Safety
 2. Community Outreach
2. Parade Ground Improvements
3. 2023 Bike Network Proposal
4. Potential Protected Bike Lanes
5. Summary & Next Steps

Background



Background

Safer Cycling

- **Community Board 14** (CB 14) identified as **Priority Bicycle District** due to high number of bicyclists Killed or Seriously Injured (KSI) and medium bicycle network coverage
- **38 cyclists** were Killed or Seriously Injured (KSI) in 5-year period (2016-2020) in CB 14
- Most recent fatality on Parkside Ave in October 2022



Protected Bike Lanes

34% reduction in risk of injury

On the highest-risk streets, cycling risk or injury is reduced by over 60%



Standard Bike Lanes

32% reduction in risk of injury

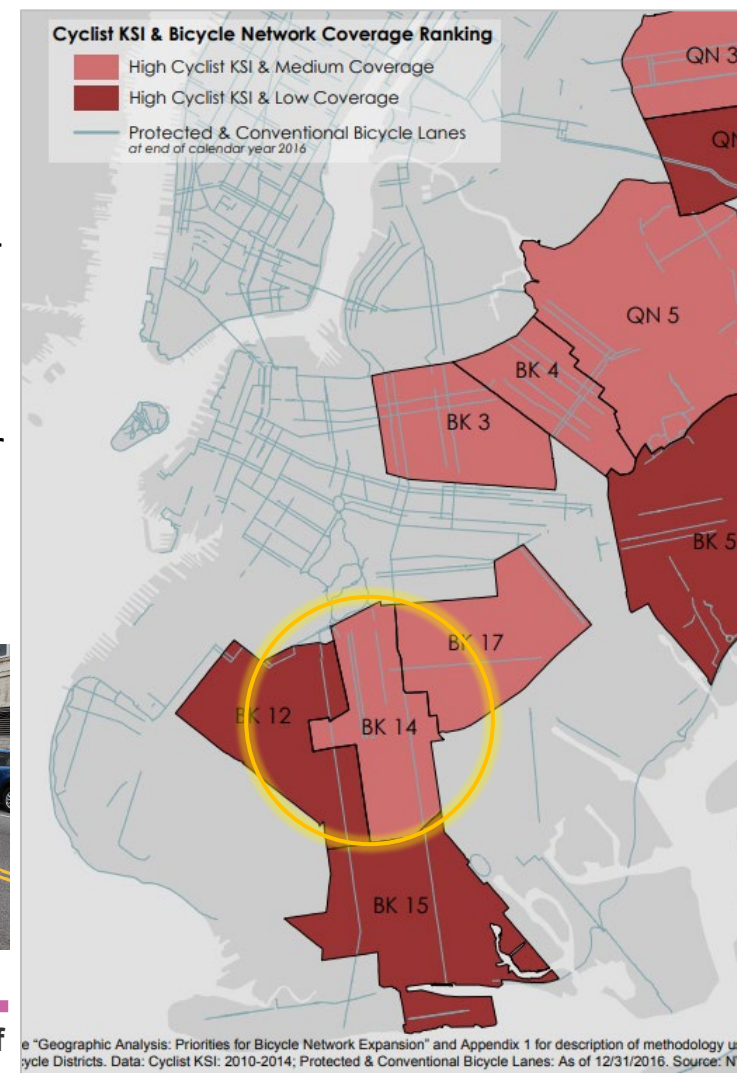
Improved safety on all study projects



Shared Lanes

18% reduction in risk of injury across all projects
Limited use (wayfinding, as part of bike blvds, or on very narrow/low volume streets)*

Bicycle Priority Districts



e "Geographic Analysis: Priorities for Bicycle Network Expansion" and Appendix 1 for description of methodology us
ycle Districts. Data: Cyclist KSI: 2010-2014; Protected & Conventional Bicycle Lanes: As of 12/31/2016. Source: NY

*Source: Safe Streets for Cycling: How Street Design Affects Bicycle Safety and Ridership. October, 2021.

[nyc.gov/dot](https://www.nyc.gov/dot)

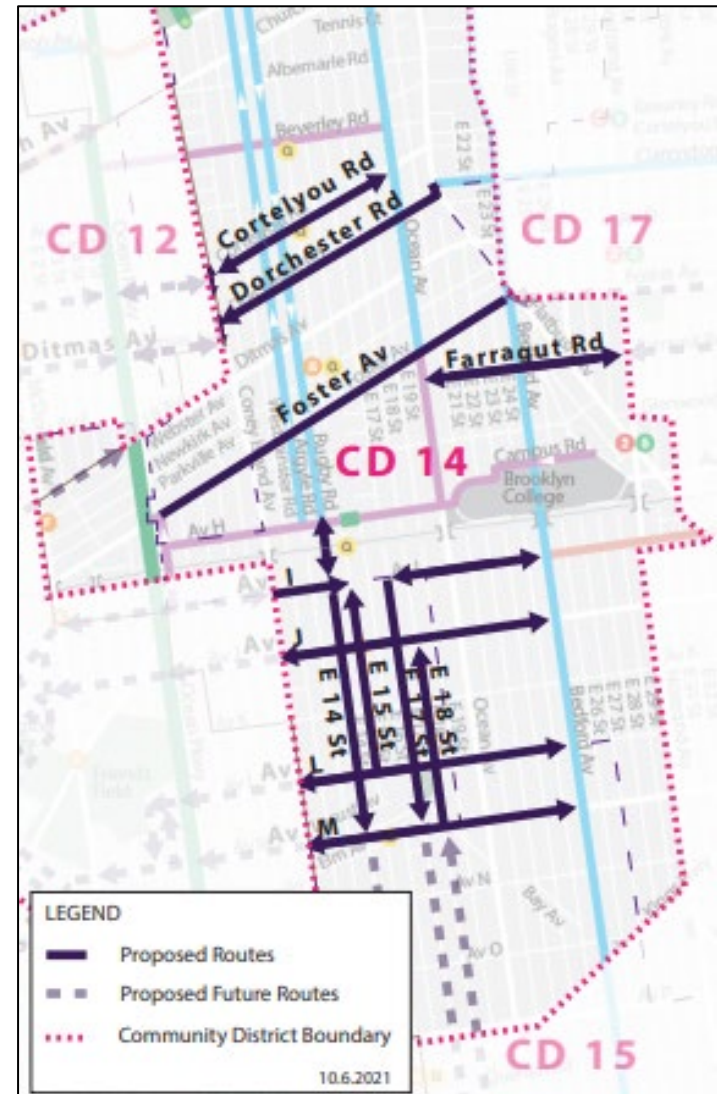
Background

Outreach History

- 2018, Summer: DOT met CB district manager to review the conceptual plan and to receive preliminary network feedback
- 2019, May: DOT met with BP's Office, CM Lander, AM Eichenstein, CM Menchaca, AM Bichotte to review the proposed routes
- 2021: NYC DOT brought an initial proposal for bike network expansion to CB14
- 2022: Gathered community feedback from digital online survey, and in-person pop-up events
- 2023: NYC DOT returns to CB 14 with updated plan



Bike network expansion proposed to CB 14 in 2021



Community Outreach

Digital Online Survey

Using a 28-question survey instrument, NYC DOT collected data on mode choice, trip patterns, barriers to cycling, attitudes, and perceptions of traffic safety in Flatbush and East Flatbush.

* 12. What types of bicycle lanes would you feel most comfortable seeing in the neighborhood? (Select all that apply)

Types of Bicycle Lanes

VISION ZERO



Protected Bike Lane



Conventional Bicycle Lane



Shared Lane

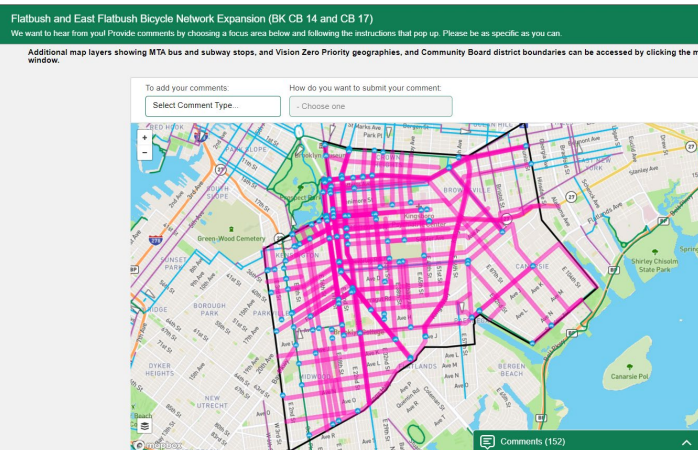
- ☐ Protected bicycle lanes
- ☐ Conventional bicycle lanes
- ☐ Shared lanes
- ☐ I don't want to see any bike lanes

Online survey included multiple choice questions and opportunities to provide written feedback

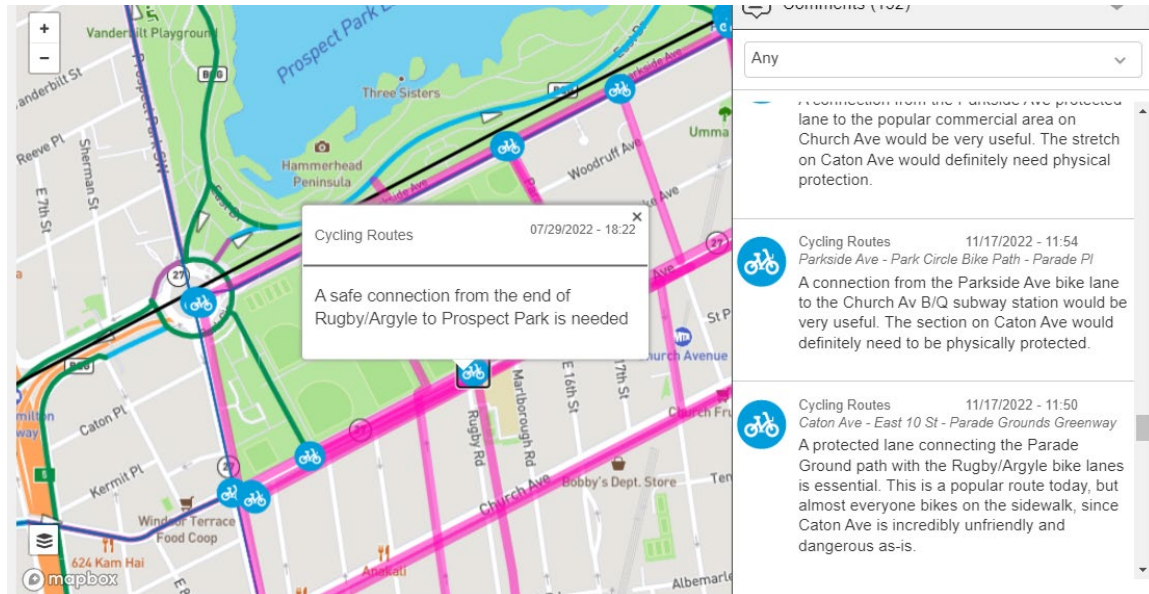
Project Portal Feedback Maps

The project portal has feedback maps that provide opportunity to give specific location-based feedback

Location Feedback Map



Suggest New Bike Routes Feedback Map



Community Outreach

Pop-Up Events and Public Surveys

Over **1,750** people participated in the survey over the course of summer 2021 and 2022, of which:

- **450 in-person surveys** were administered across 20 different DOT pop-up outreach stations in CB 14 and 17.
- **1,300+ digital** have been self-administered via online and QR flyers.
- In 2021, 60% of the survey respondents identified as living or regularly frequenting the area.
- Met with Rector of St Paul's Church Flatbush in November 2022 to share project portal and survey.



DOT Street Ambassadors interacting with community members at Pop-Up events

Background

Previous DOT Work

- In 2021, **NYC DOT** installed a new protected bike lane on Parkside Ave.



Parade Ground Improvements

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Access to Parade Ground

Existing Conditions

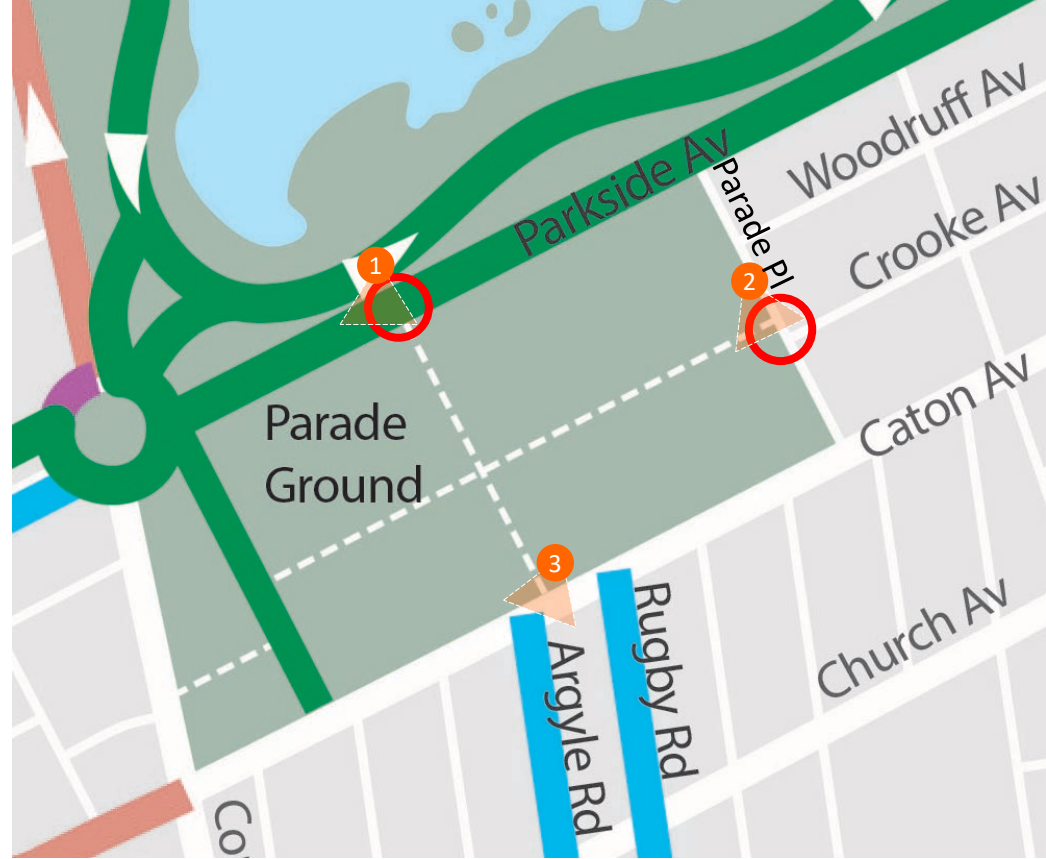
Missing Bike and Pedestrian Crossings to Park Pathways



Pedestrians and cyclist waiting for gap to cross Parkside Ave



Pedestrian crossing on Parade Place to Crooke Ave



Cyclist with child crossing Caton Ave at Argyle Rd to bike through Parade Ground

Legend

- Existing Bike Facilities
- Protected Path
- Bicycle Lane
- Missing Crossings

Access to Parade Ground

Proposal

- 1 Install midblock signal on Parkside Ave at the entrance to the Parade Grounds
- 2 Install enhanced crossings on Parade Place at Crooke Ave
- 3 Upgrade ramps and install bike crossing on Caton Ave at Argyle Rd



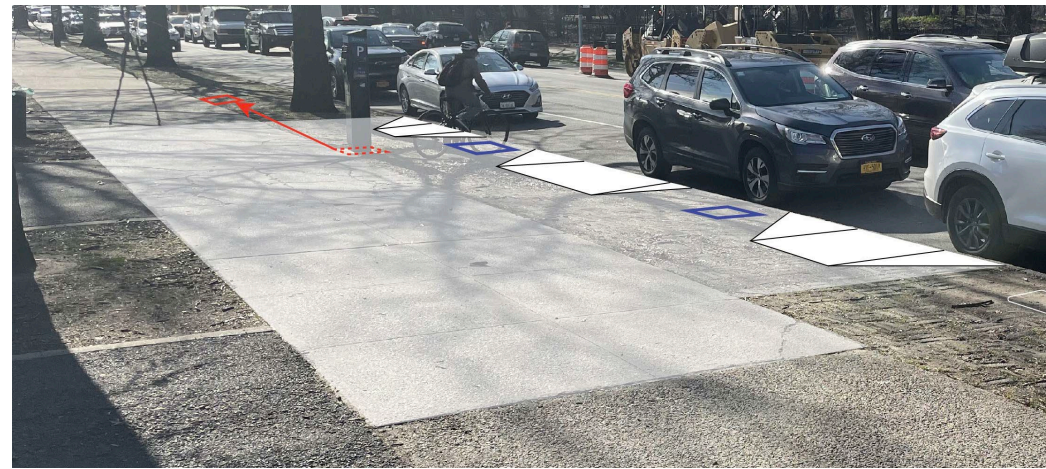
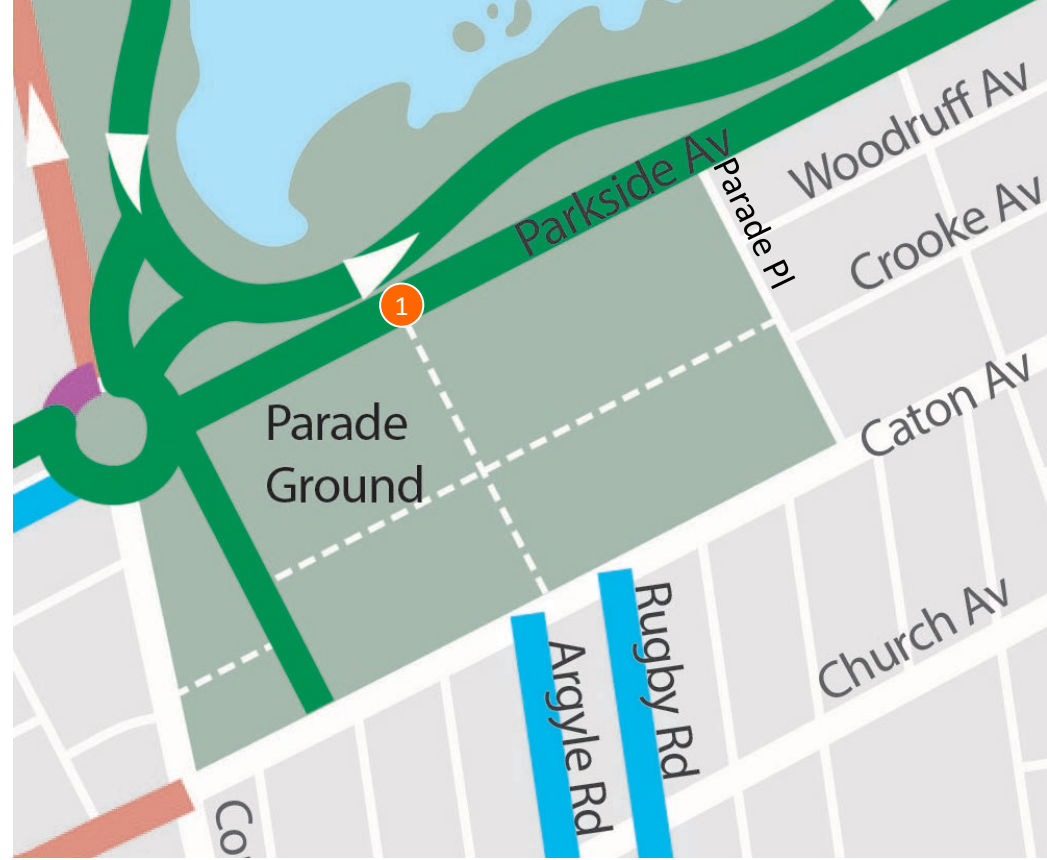
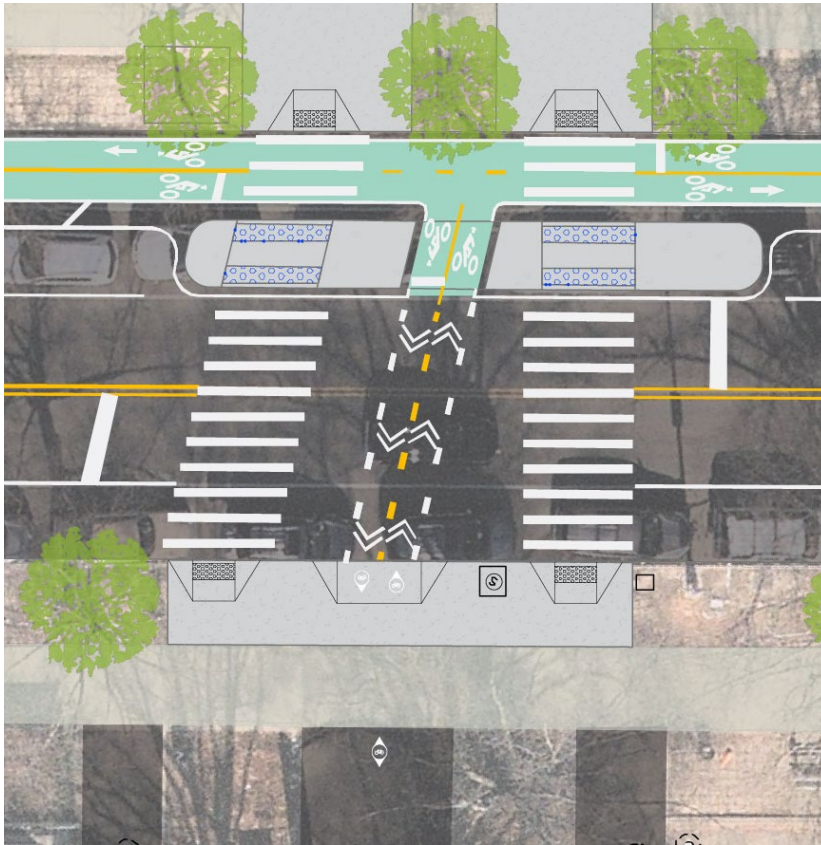
Example: Signalized crossing on Prospect Park West at 9th St



Access to Parade Ground

Proposal – Parkside Ave

- 1 Install a midblock signal on Parkside Ave at the entrance to the Parade Grounds



Access *through* Parade Ground

Existing Conditions

- Gap in bike network to connect Argyle and Rugby bike lanes to Parkside Ave greenway
- Stratford path is mapped but not reflected in existing field conditions



Cyclist using sidewalk along Caton Ave to exit Parade Ground pathway



Cyclists using Stratford Pathway in Parade Ground



Cyclist exiting Argyle Pathway at Caton Ave

Legend

Existing Bike Facilities

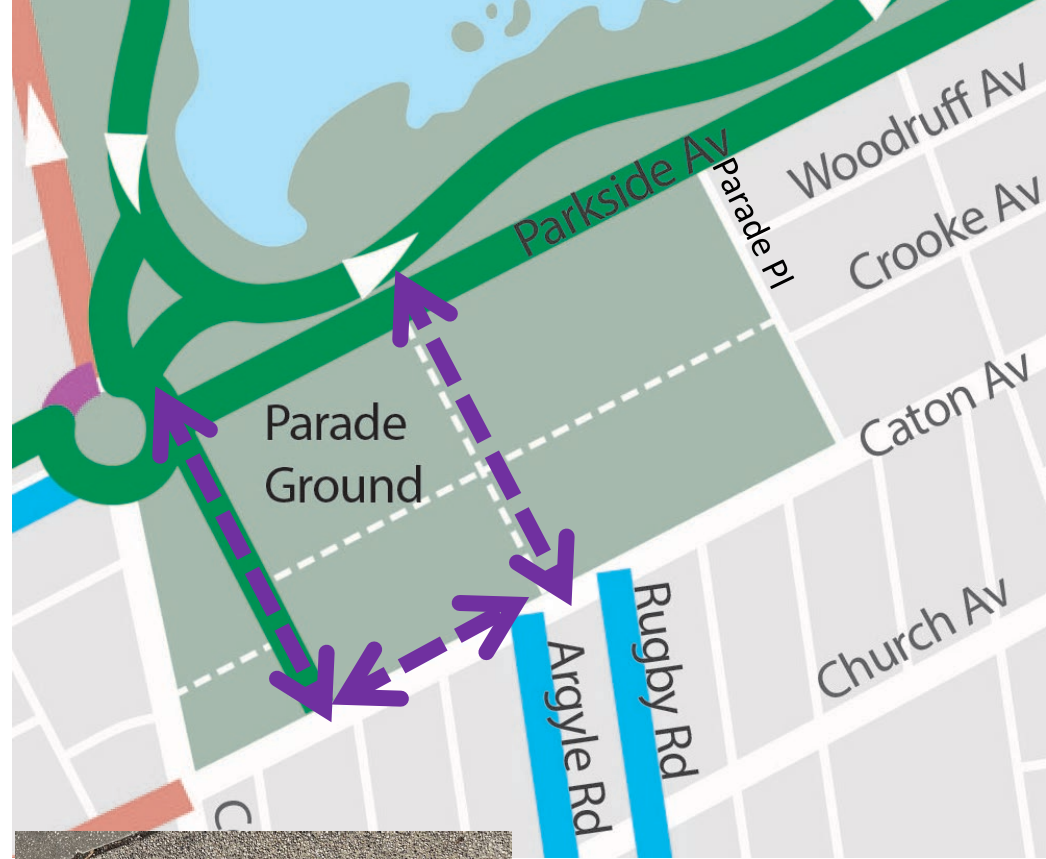
- Protected Path
- Bicycle Lane

Access *through* Parade Ground

Potential Design Solutions



Example: bike stamps in City Hall Park



Example: bike stamps and signage on Parkside at Park Circle



NYC DOT coordinating with NYC Parks

2023 Bike Network Proposal

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Street Improvement Projects Toolbox



Shared Bicycle Lanes

Shared lane markings guide cyclists where to ride on the street

- **Alert drivers & cyclists of shared space**
- **Provide wayfinding for cyclists**
- **Guide cyclists away from car doors**



Standard Bicycle Lanes

Bicycle lane provides dedicated space in the road

- **Discourage speeding** by visually narrowing the road
- **Increase predictability** by clearly defining road space for each user



Protected Bicycle Lanes

Bicycle lane protected by bollards or floating parking

- Maximizes **traffic calming** by physically narrowing roadways
- **Increases safety for all road users** by shortening crossing distances for pedestrians, & separating people driving and biking

Bike Network

Existing Bike Network

Network Development Goals

Improve safety for all road users

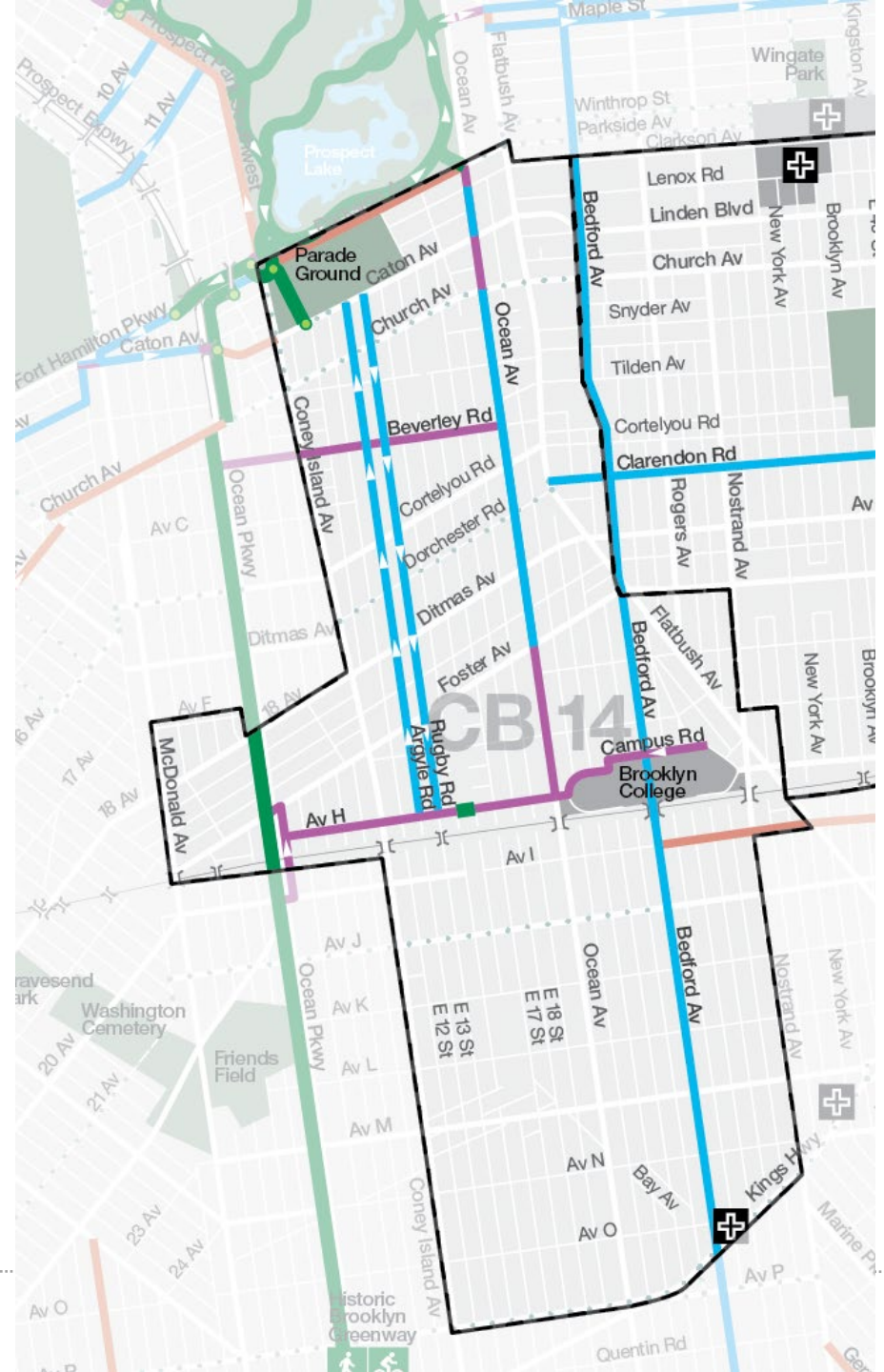
Close gaps in bicycle network

- 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



Bike Network

Proposed Bike Network







Add new cycling routes to key destinations

- **North South** connections
- **East West** connections

Route Selection Criteria

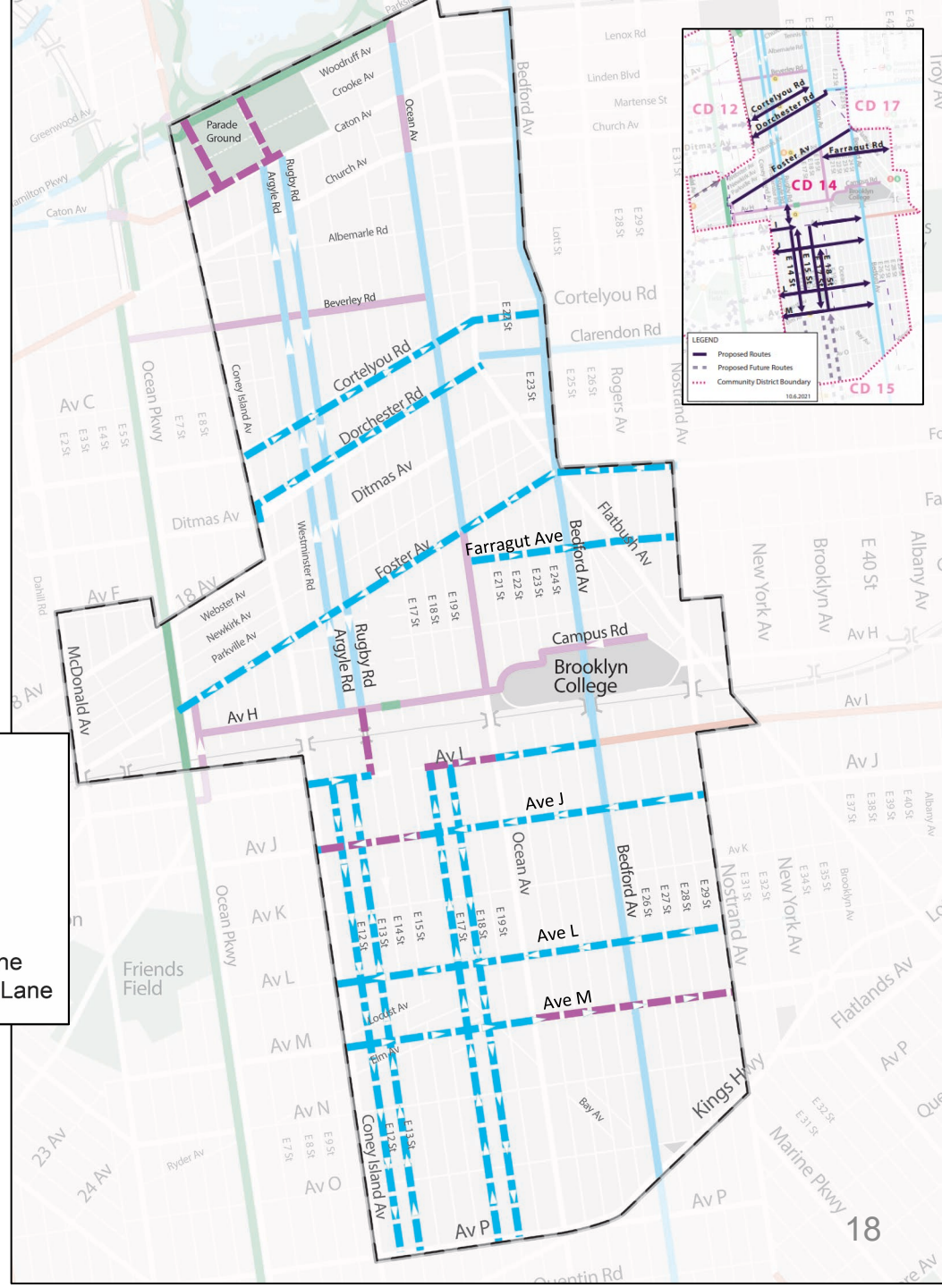
- Continuity of street
- Street width
- Connectivity to existing network

Proposed Bike Facilities BK Community Boards 14

- | | |
|---|----------------------|
|  | Protected Path |
|  | Bike Lane |
|  | Shared Lane |
|  | Signed Route |
|  | Proposed Bike Lane |
|  | Proposed Shared Lane |

Bicycle lanes create new neighborhood connections

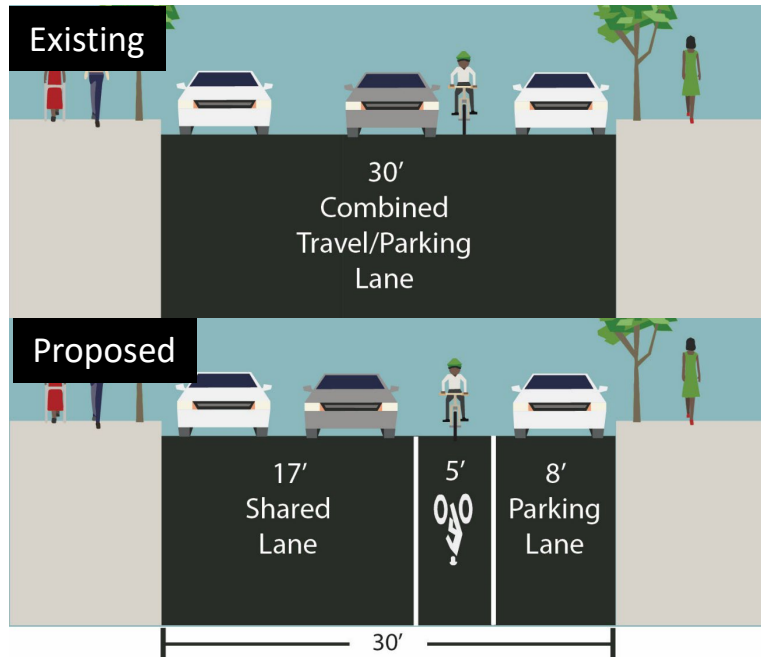
- Provide dedicated space and wayfinding for cyclists
- Connects to existing bicycle lanes and district boundaries
- **No parking loss or travel lane removal**



Bike Network Proposal

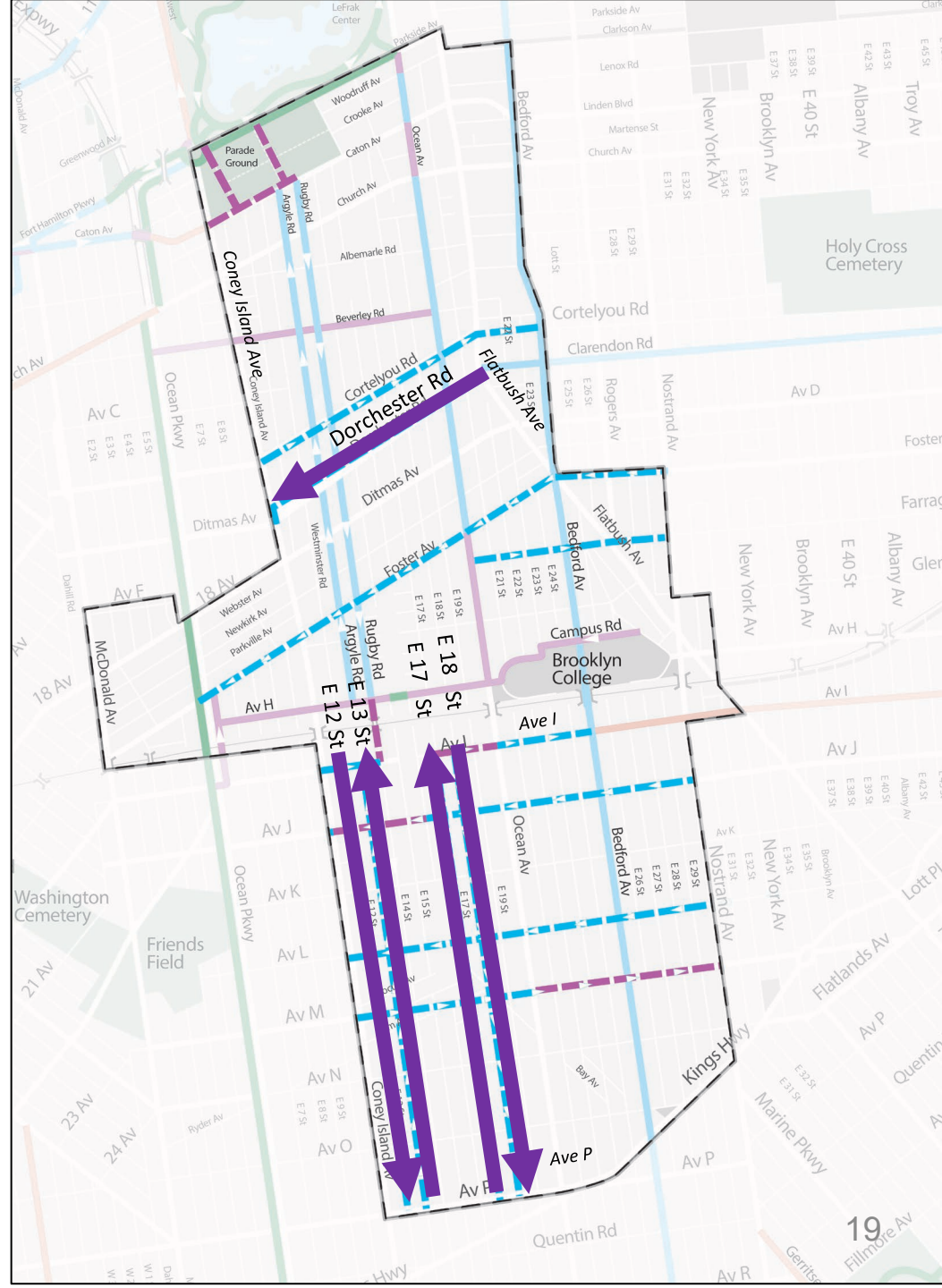
30' to 33'-wide Corridors

- Dorchester Rd
- E 12 St
- E 13 St
- E 17 St
- E 18 St



Bicycle lanes create new neighborhood connections

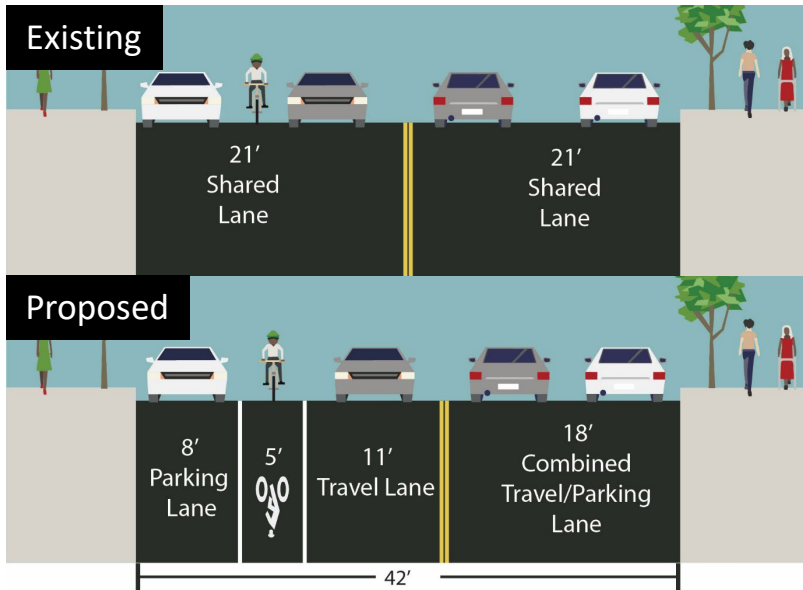
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Bike Network Proposal

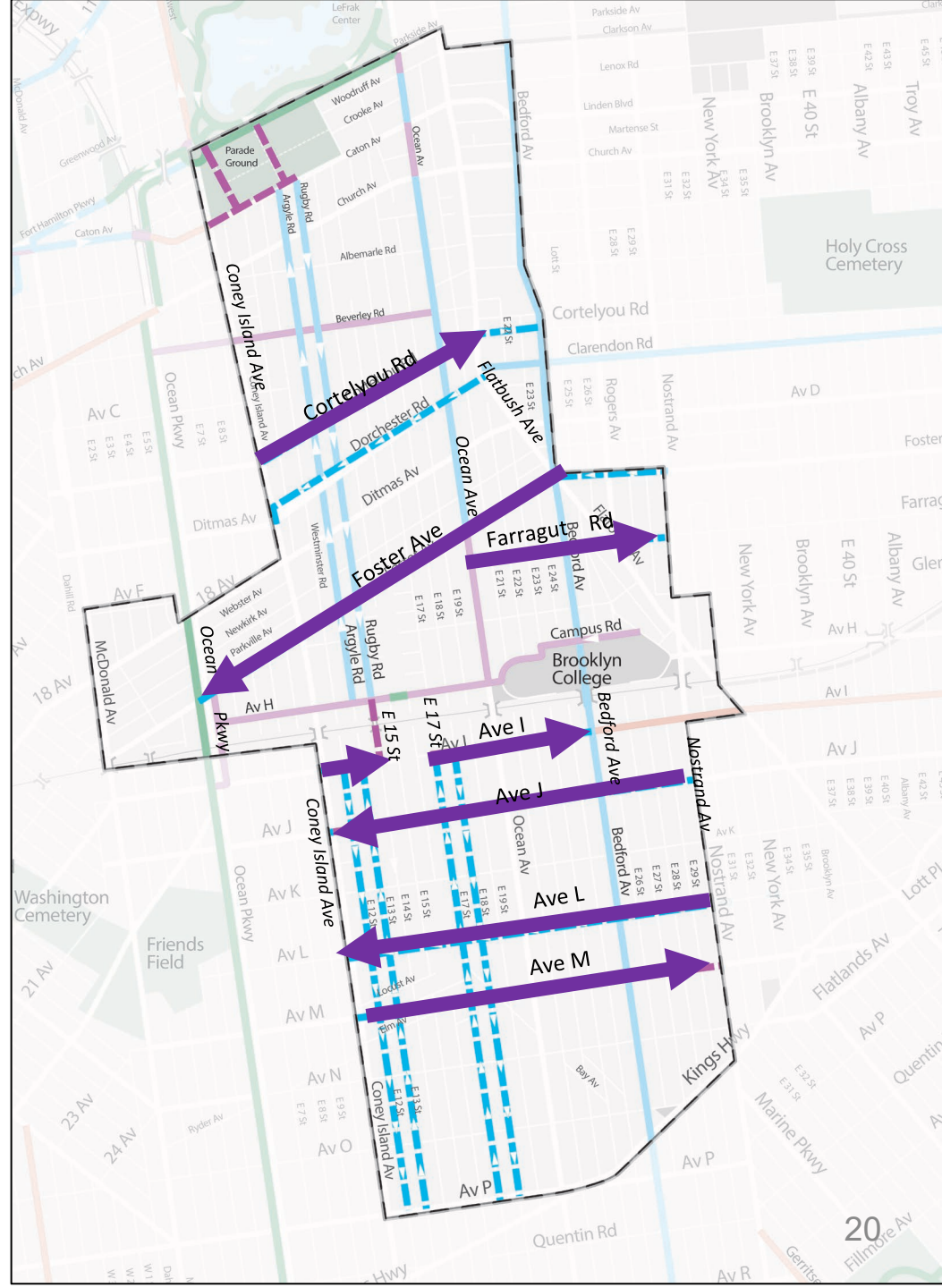
42' to 44'-wide Corridors

- Cortelyou Rd
- Foster Ave
- Farragut Rd
- Ave I
- Ave J
- Ave L
- Ave M



Bicycle lanes create new neighborhood connections

- Provide dedicated space and wayfinding for cyclists
- Connects to existing bicycle lanes and district boundaries
- **No parking loss or travel lane removal**



Potential Protected Bike Lanes

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SAFETY – Protected Bike Lanes

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

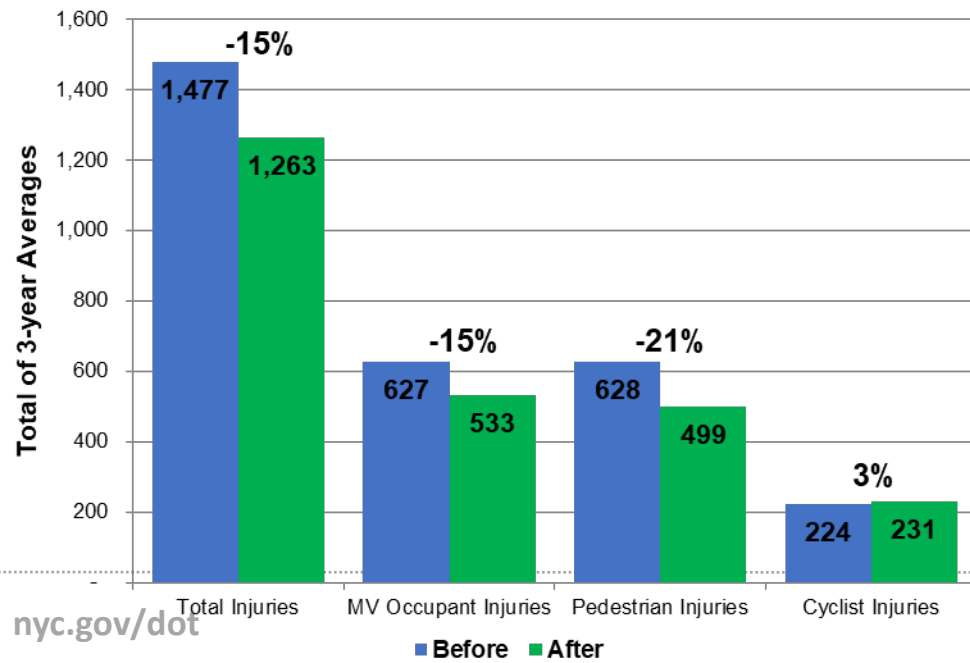
- 15% drop in all crashes with injuries
- 21% drop in pedestrian injuries

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

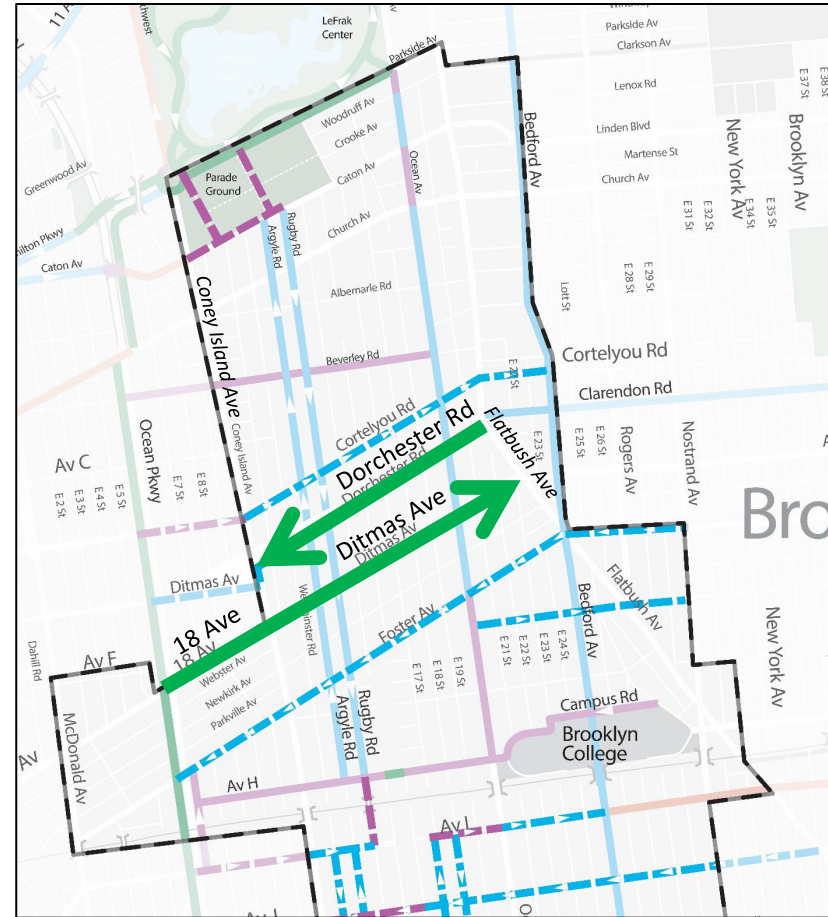


Data from 25 separate protected bicycle lane projects installed from 2007-2014 with 3 years of after data. Includes portions of 1 Ave, 2 Ave, 8 Ave, 9 Ave, Broadway, Columbus Ave, Hudson St, Lafayette St / 4 Ave, Sands St, Allen/Pike St, Kent Ave, Prospect Park West, Flushing Ave, Bruckner Blvd & Longfellow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

Potential Protected Bike Lanes

Potential Protected Bike Lane

- More family-friendly, all-ages and all-abilities bicycling environment
- Bigger trade-offs than conventional bike lanes
- Require more time to study feasibility
- Potential Routes:
 - Dorchester Rd (Flatbush Ave to Coney Island Ave)
 - Ditmas Ave/18 Ave (Ocean Pkwy to Flatbush Ave)



Dorchester Rd

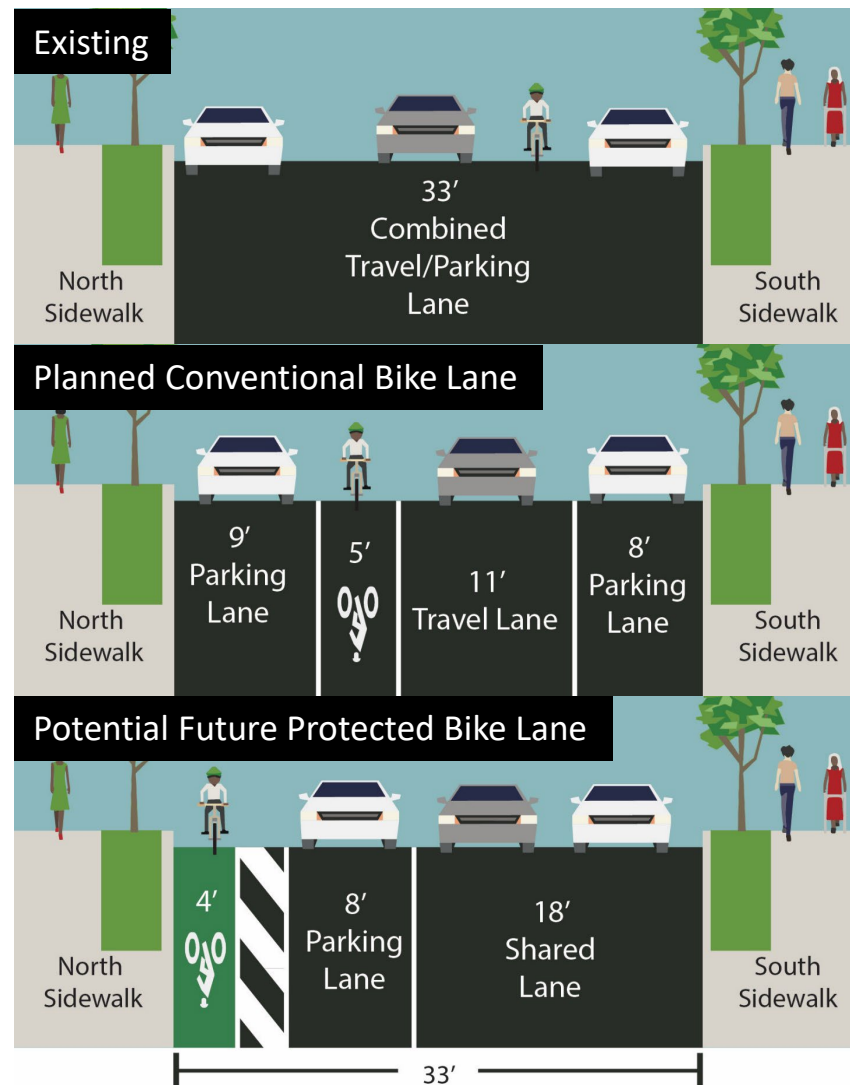
Potential Protected Bike Lane

Benefits:

- Slower vehicular turns
- Shortened pedestrian crossings
- Bike lane physically separated from moving traffic

Trade-offs:

- Some parking loss at corners required to maintain adequate visibility between cyclists and turning drivers (~1-2 spots per block)



Ditmas Ave/18 Ave

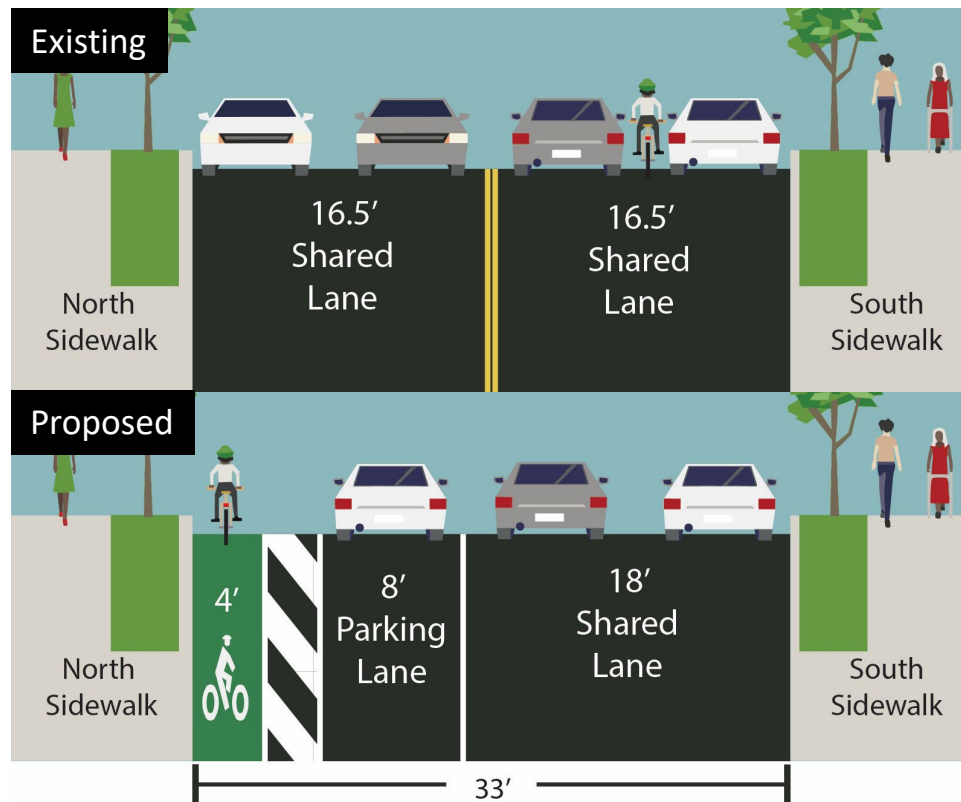
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Benefits:

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- Bike lane physically separated from moving traffic

Trade-offs:

- Some parking loss at corners required to maintain adequate visibility between cyclists and turning drivers (~1-2 spots per block)
- Requires converting Ditmas Ave and 18 Ave to one-way eastbound
- Requires rerouting westbound B8 buses off 18 Ave



Ditmas Ave/18 Ave: Alternative Design

Potential Protected Bike Lane

Alternative design:

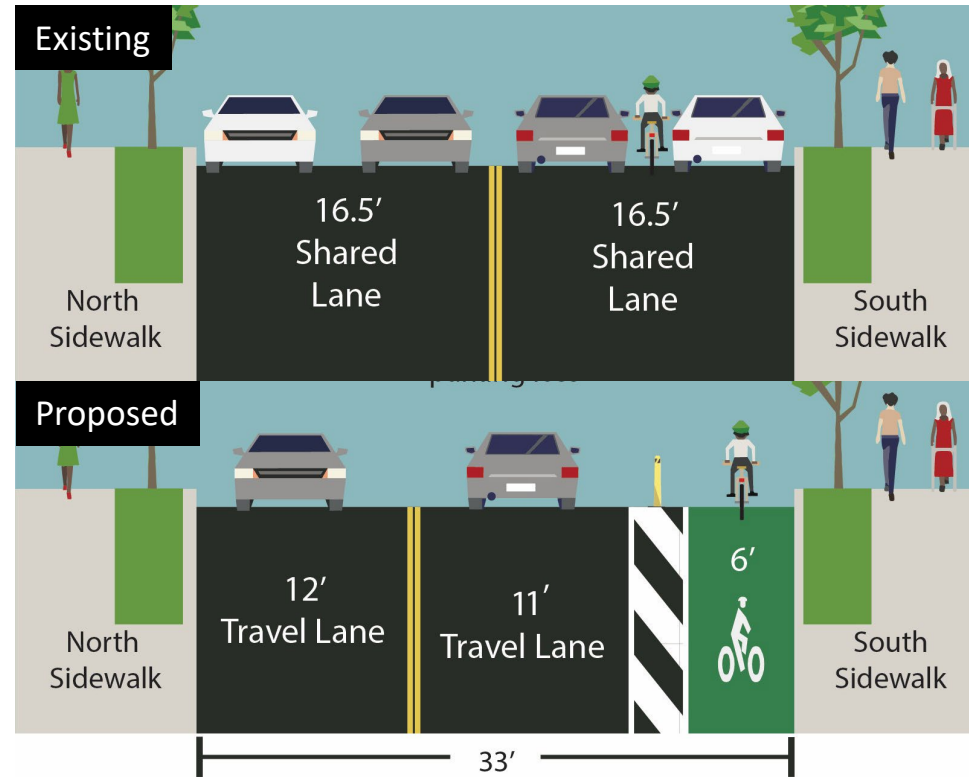
- Maintain two-way street operation
- Clear all parking

Benefits:

- No traffic diversions, bus reroutes

Trade-offs:

- Loss of on-street parking



Summary & Next Steps

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Summary & Next Steps

- Signal on Parkside Ave and Enhanced Crossing on Parade Pl approved, target install date Fall 2023
- NYC DOT to install conventional bike lane network expansion in 2023/2024
- NYC DOT to return to the community board with protected bike lane proposals

Thank You!

Questions?



NYCDOT



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NYCDOT

Example of Signal with Pedestrian Islands

Prospect Park West at 9th St



Example of Enhanced Crossing

Heath Ave and Summit Pl, Bronx



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