



EMMONS AVENUE JAMAICA BAY GREENWAY CONNECTOR

Traffic Calming and Protected Bike Lanes
Presented to Brooklyn Community Board 15 – October 25, 2021



PRESENTATION OVERVIEW

1. Background
2. Proposal
3. Making It Work
4. Summary



Background

1

JAMAICA BAY GREENWAY

11 miles of recreational paths
for biking and jogging

Provides access to **10,000 acres**
of parks and beaches

Gaps in route

Difficult to get to from
adjacent neighborhoods



Plumb Beach



Jacob Riis Park



Floyd Bennett Field



Fresh Creek Nature Preserve



100,000+ people use Jamaica Bay
Greenway to visit park sites each year
*Source: National Park Service travel survey:
Jamaica Bay Greenway Missing Links Study, 2010*

JAMAICA BAY GREENWAY IMPLEMENTATION PLAN

Goals and Process

Improve access & connectivity to Greenway for adjacent neighborhoods

- Outreach began in 2014
- 3 rounds of workshops
- Multiple events including guided bicycle rides

Released Plan Summer 2016

- 26 potential projects
- 19 miles of new or enhanced greenway



March 2014

Oct 2014



May 2015

July 2016

Round 1:
Existing Conditions

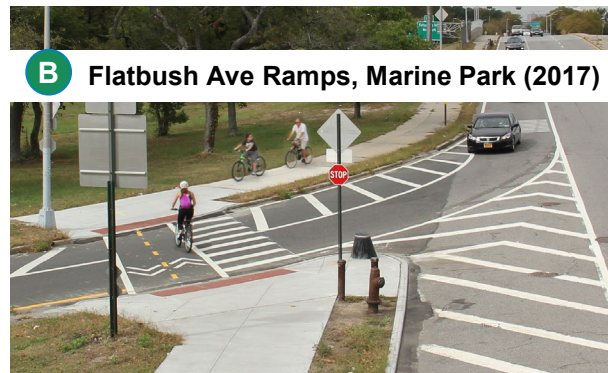
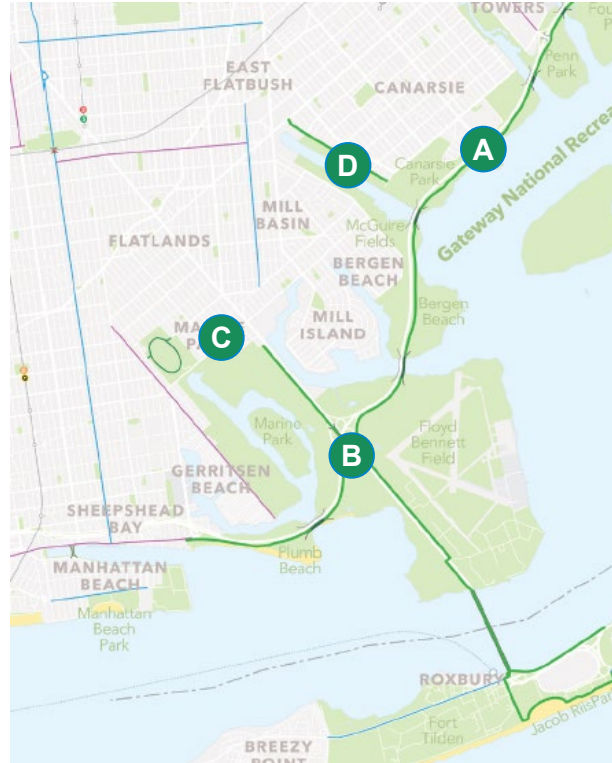
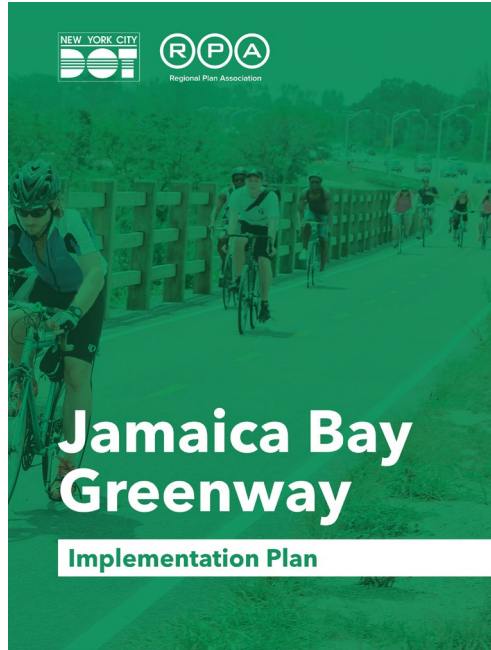
Round 2:
Route Alternatives

Round 3:
Final Route Selection

Plan Release

JAMAICA BAY GREENWAY IMPLEMENTATION PLAN

Several Projects Already Completed



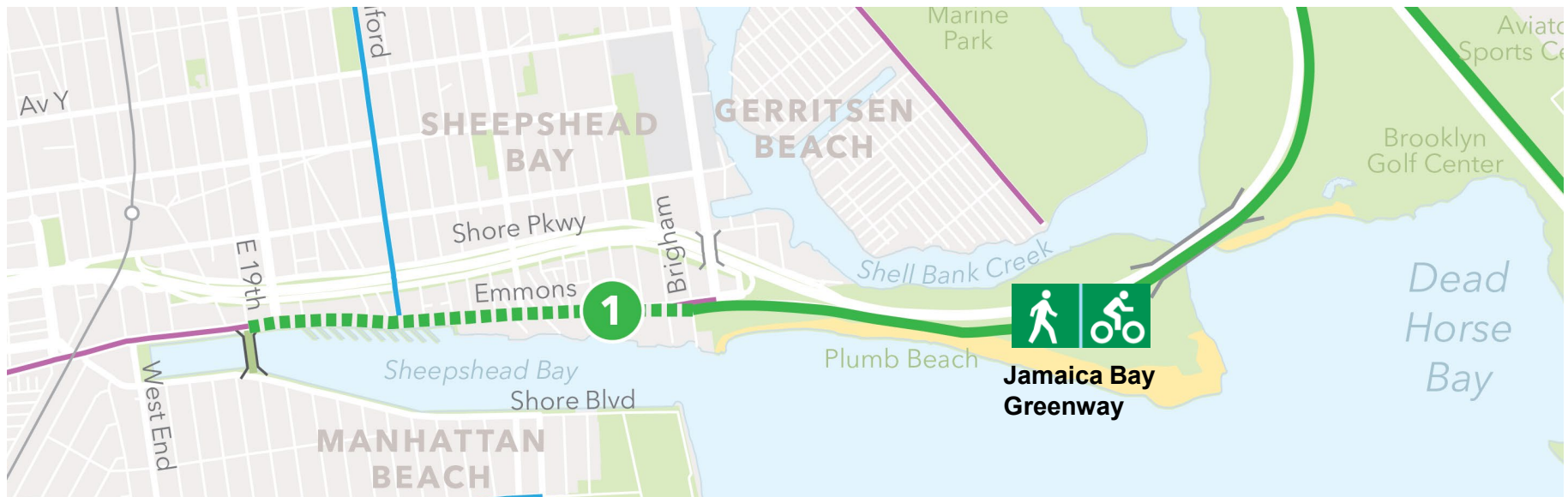
JAMAICA BAY GREENWAY ACCESS AT EMMONS AVE

Priority project in plan improves access from neighborhood to:

- New Brigham Street – Lew Fidler Park
- Jamaica Bay Greenway entrance at Brigham St
- Plumb Beach
- Floyd Bennett Field
- Jacob Riis Park



Emmons Ave was the preferred connection identified through community planning process

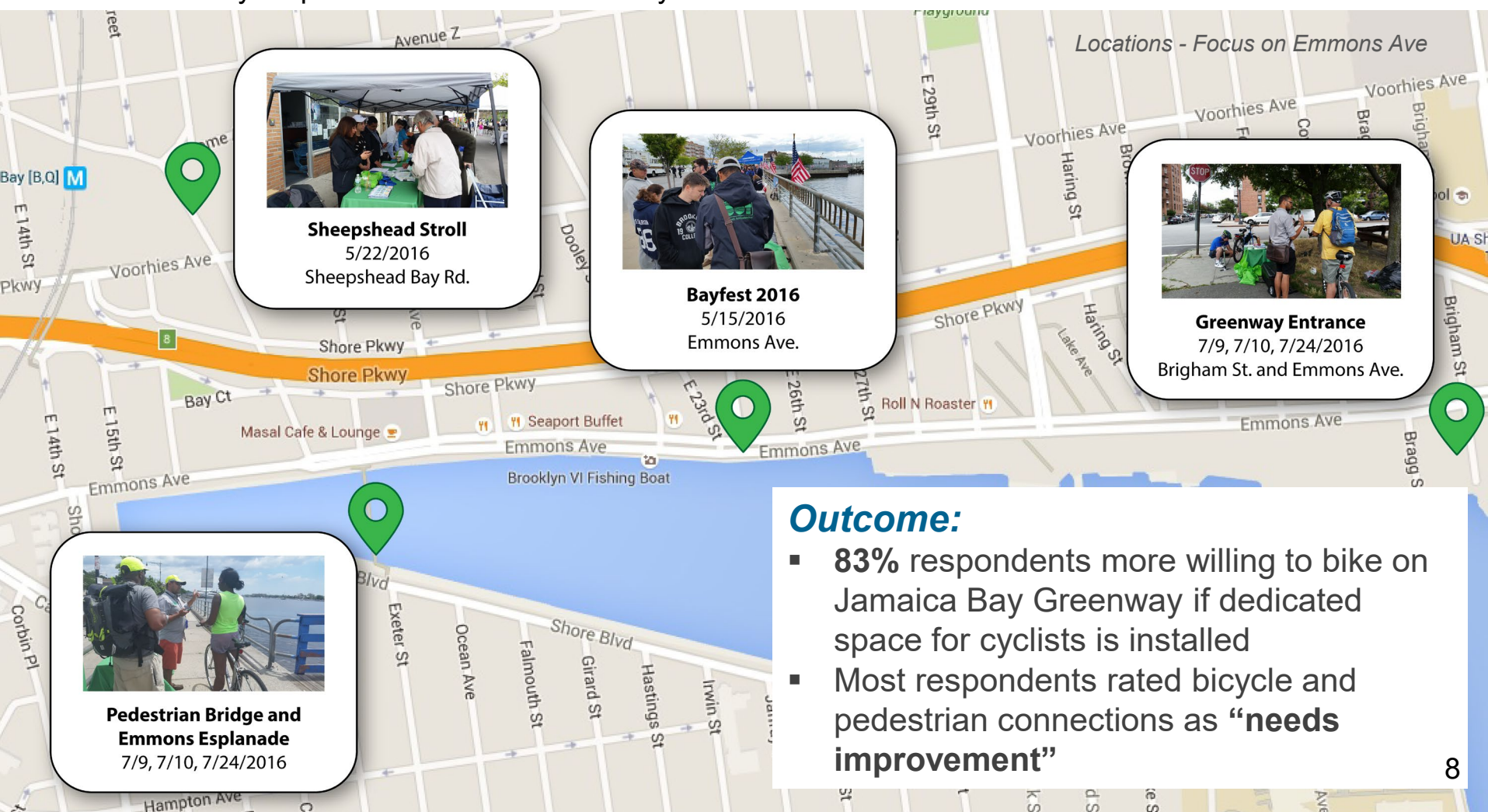


Map is excerpt from Jamaica Bay Greenway Implementation Plan

STREET AMBASSADOR OUTREACH

On-Street Surveying

- Additional outreach to hear community response to Jamaica Bay Greenway Implementation Plan after the plan release
- 8 on-street outreach sessions held
- 50% of survey respondents lived in Community District 15



Sheepshead Stroll
5/22/2016
Sheepshead Bay Rd.



Bayfest 2016
5/15/2016
Emmons Ave.



Greenway Entrance
7/9, 7/10, 7/24/2016
Brigham St. and Emmons Ave.

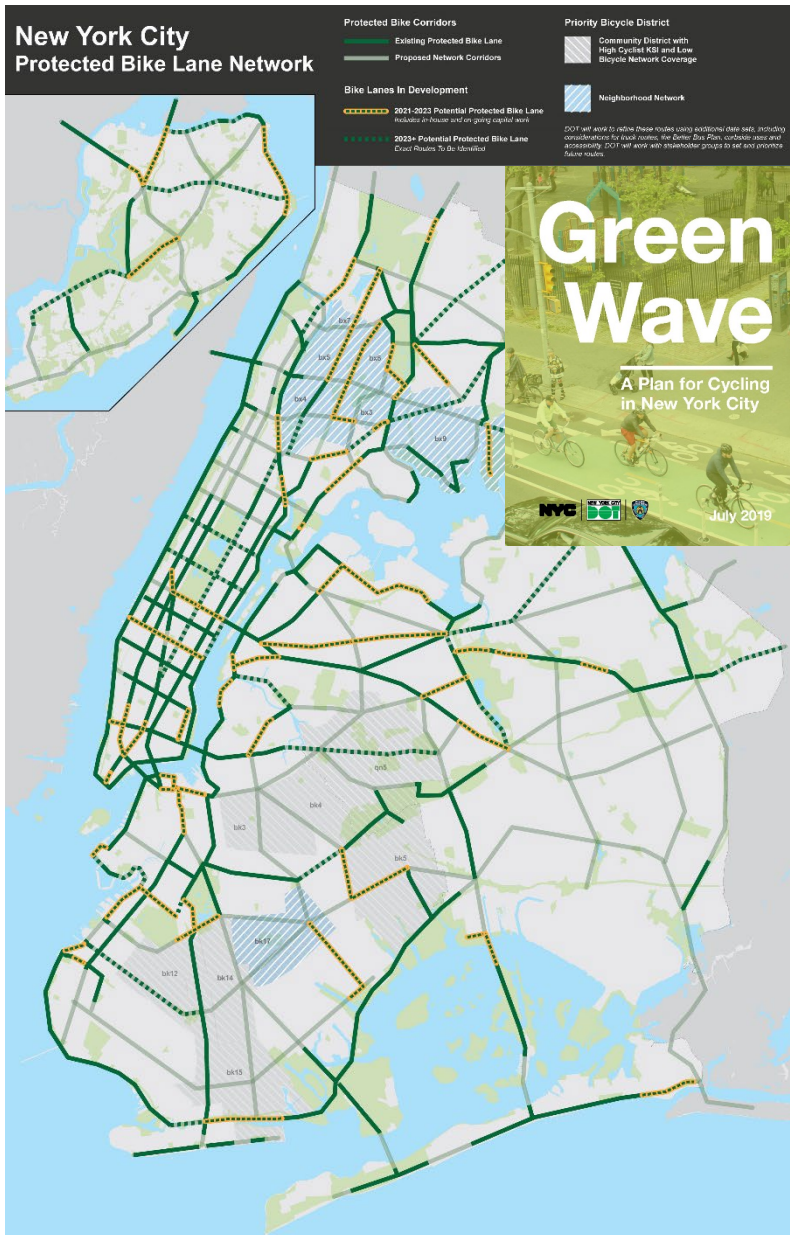


**Pedestrian Bridge and
Emmons Esplanade**
7/9, 7/10, 7/24/2016

Outcome:

- **83%** respondents more willing to bike on Jamaica Bay Greenway if dedicated space for cyclists is installed
- Most respondents rated bicycle and pedestrian connections as “**needs improvement**”

GREEN WAVE A PLAN FOR CYCLING IN NEW YORK CITY



Analysis of fatalities – key findings (2014 - 2019):

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

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

Better Design:

- Implement **new design standards** based on national & international best practice **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 road campaign.
- Educate all street users about safe truck operation on city streets
- **Increase helmet giveaways and helmet use encouragement**

NYPD Enforcement:

- **Target enforcement on highest risk activities:** speeding, failing to yield, blocking bike lanes, oversized trucks/trucks off route

GREENWAY LONG TERM PLANNING

Greenway Plan for NYC

NYC Dept of City Planning, 1993



Schematic Greenway Plan

- Proposed Greenway connection along Emmons Ave

Shore Parkway Greenway Connector Master Plan

NYC Dept of City Planning, 2003

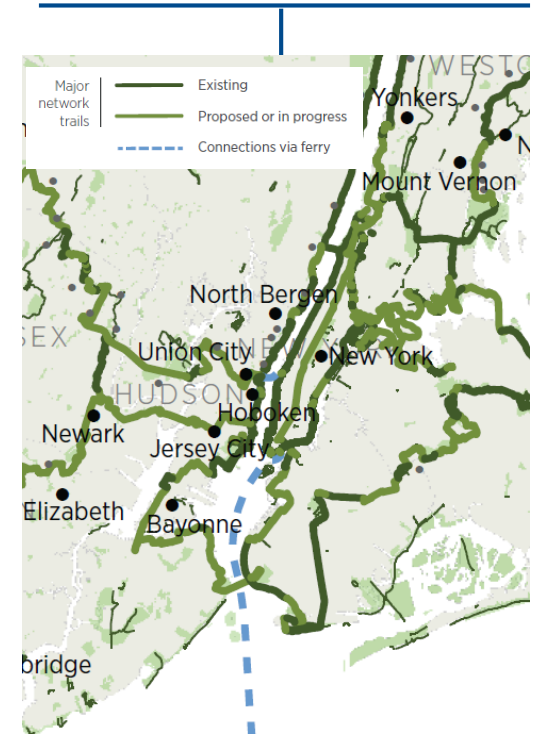


Proposed Route on Emmons

- Recommendations for bicycle connections to close gaps between Shore Parkway Greenway segments

Fourth Regional Plan

Regional Planning Association, 2017



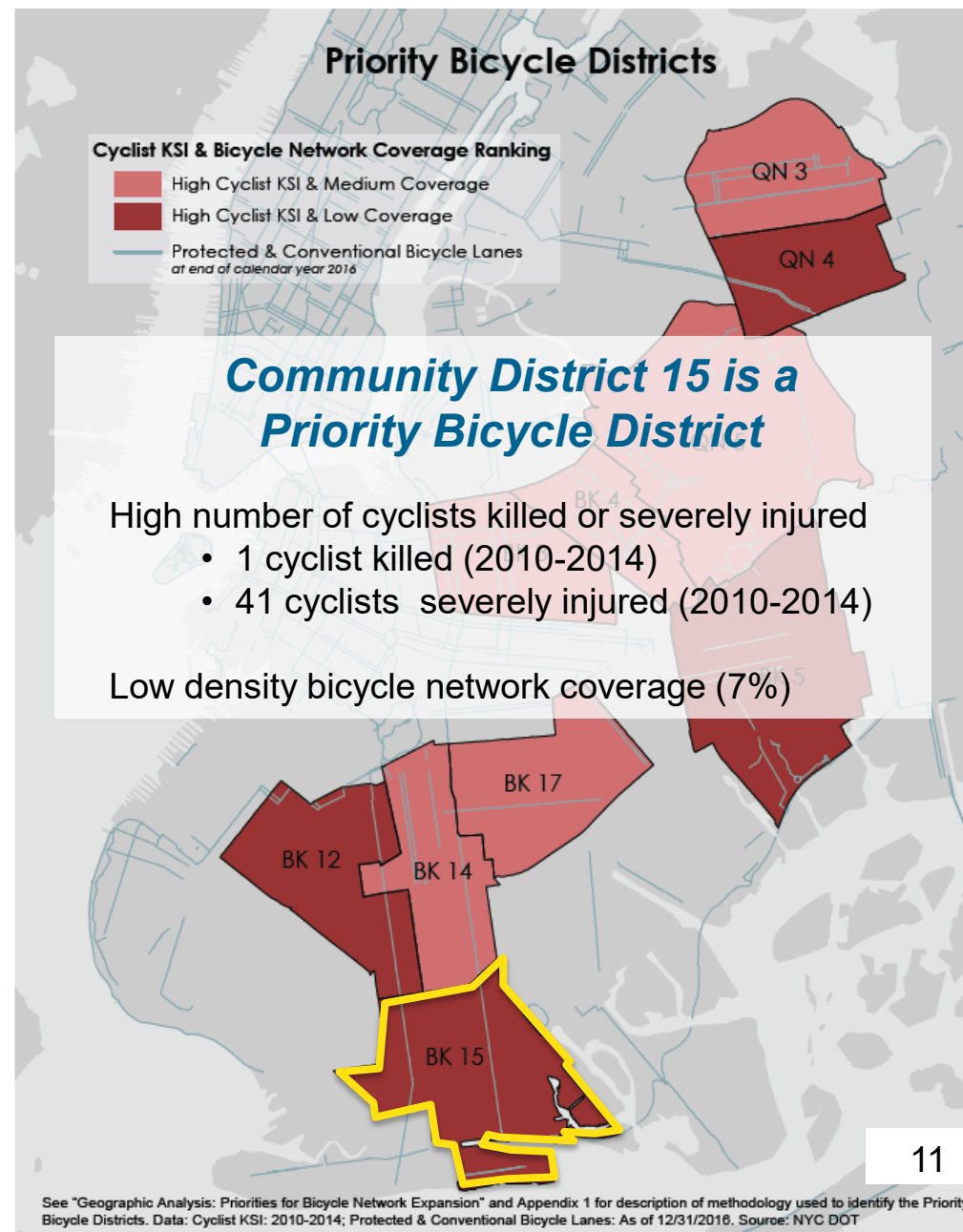
Create a Tri-state Trail Network

- More than 1,620 miles of biking, hiking, and walking trails would put more than 8 million residents within a half-mile of a trail, increasing access by 25%.

CYCLING SAFETY STUDY - 2017



The vast majority (89%) of cyclist fatalities occurred on streets **without bike lanes** (2006 – 2016)



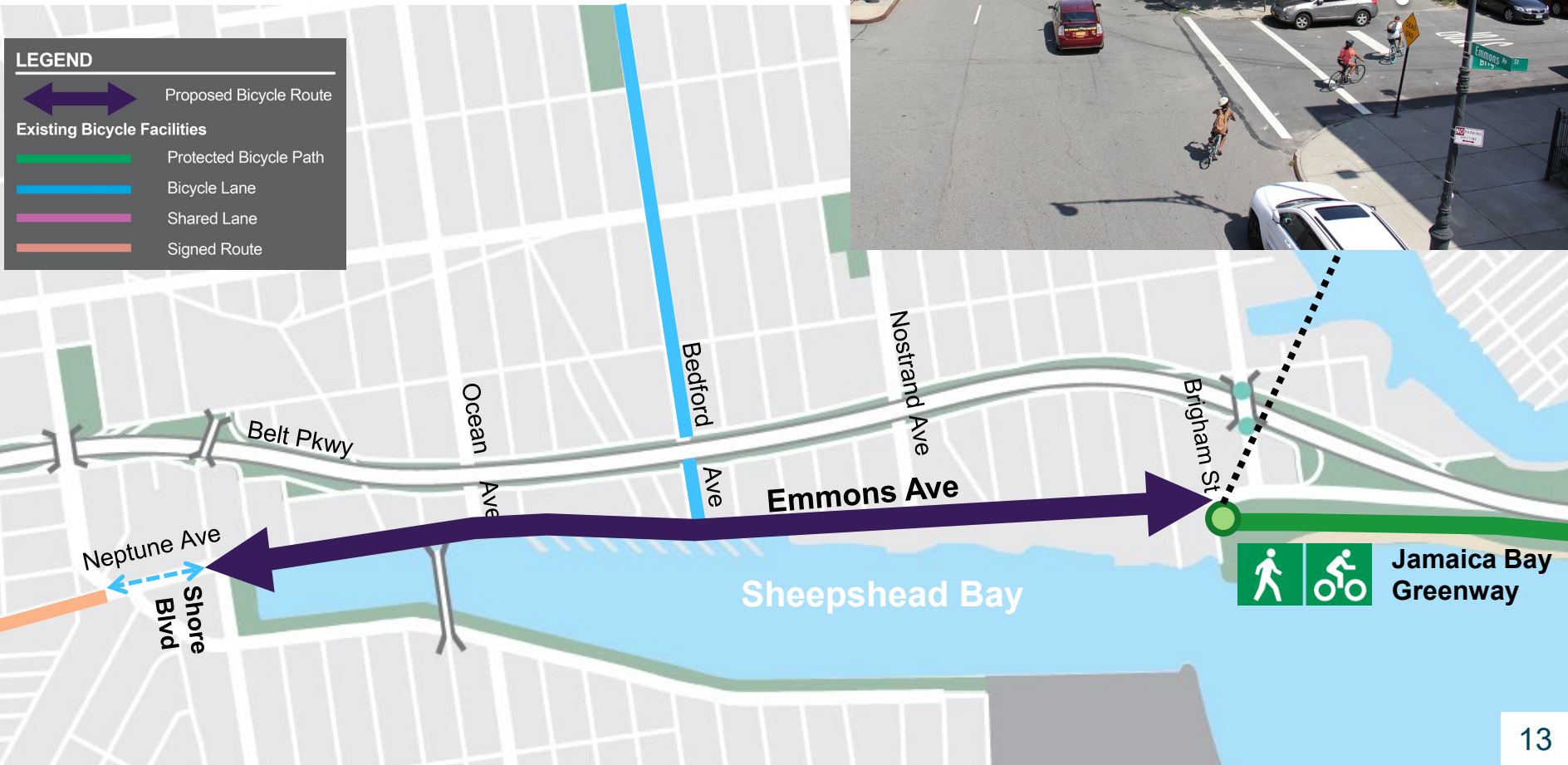
Proposal

2

PROJECT LOCATION

Provides access to Jamaica Bay Greenway from Sheepshead Bay

Creates new bike network connection & closes gap



EMMONS AVE: EXISTING CONDITIONS & ISSUES

Residential and commercial corridor, actively used by vehicles, pedestrians and cyclists

- **Long crossings for pedestrians** between residential/commercial and waterfront destinations
- **No dedicated space for cyclists** – signed bicycle route without markings
 - Bicycle ridership has more than doubled recently: 12 HR counts: 698 (2015), 871 (2017), 1417 (2019), 1571 (2021)
- **High speeds on Emmons Ave** during off-peak hours (88% of vehicles speeding above the limit)
- **High crash corridor** – 16 people killed or severely injured 2014-2018 (top third of Brooklyn corridors)
- **Cyclists mix** with westbound roadway traffic and double parked cars during evening peak hour



PARKING PROTECTED TWO-WAY BICYCLE PATH

Benefits

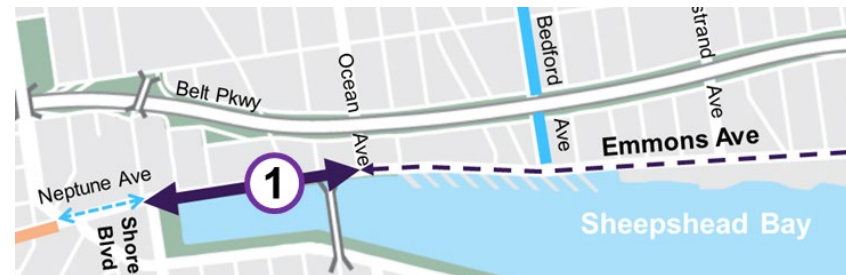
- **Extends greenway** experience into neighborhood
- Provides **comfortable** space for cyclists of varied ages and experience levels
- **Reduces conflicts** between cyclists and vehicles - reconfigured parking separates bikes from moving vehicles
- Increases **predictability** of cyclist location for drivers - path consolidates cyclists to one location
- **Expands waterfront access**, separates pedestrians on the promenade from cyclists by providing separate spaces



① EMMONS AVE: Shore Blvd to Ocean Ave

Existing Conditions

Emmons Ave at E 16th St, facing east



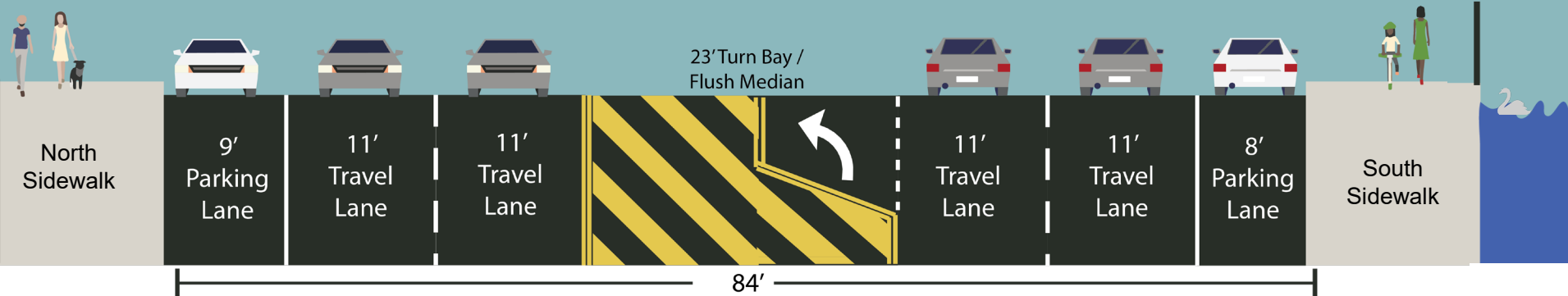
1 PARKING PROTECTED TWO-WAY BICYCLE PATH

Emmons Ave: from Shore Blvd to Ocean Ave

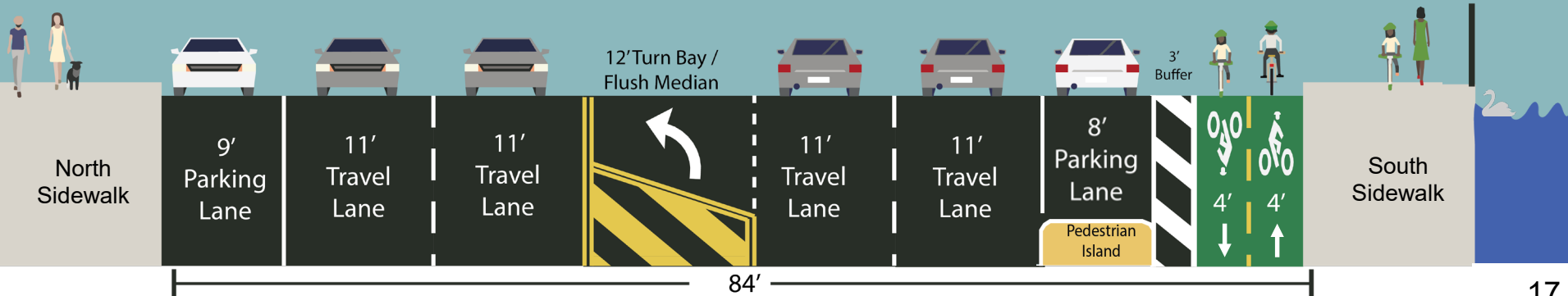
- Shift painted median to create space for bicycle path
- Maintain all travel lanes and parking spaces
- Cyclists protected by parked cars
- Shorten crossing distances for pedestrians w/islands



Existing Conditions



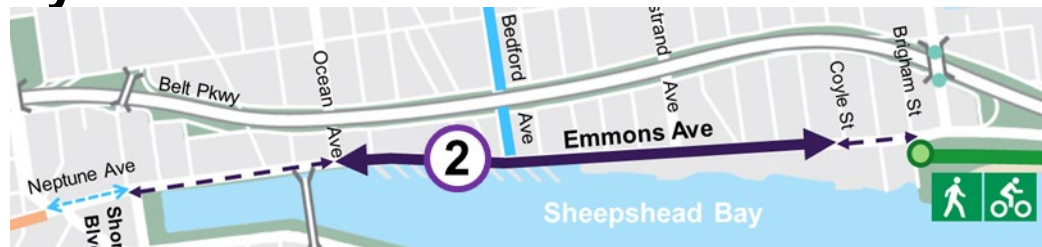
Proposed Design



② EMMONS AVE: Ocean Ave to Coyle St

Existing Conditions

Emmons Ave at Bedford Ave, facing east



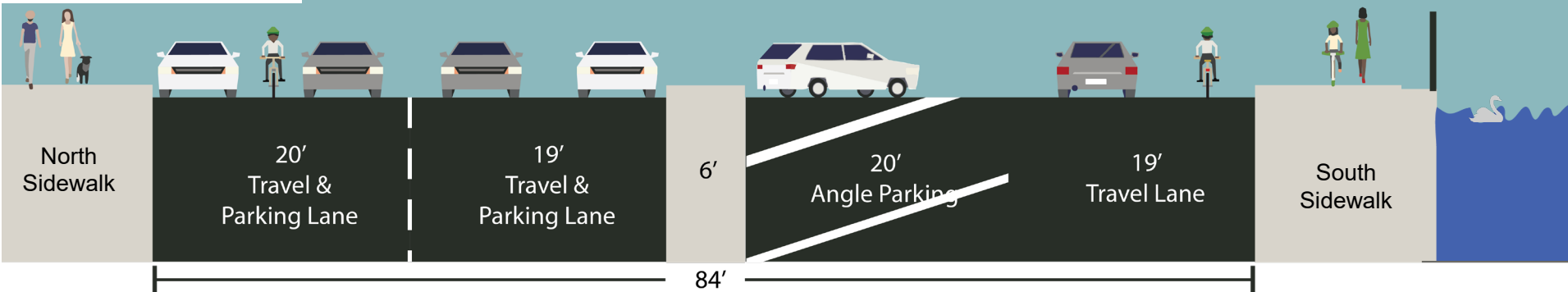
② PARKING PROTECTED TWO-WAY BICYCLE PATH

Emmons Ave: from Ocean Ave to Coyle St

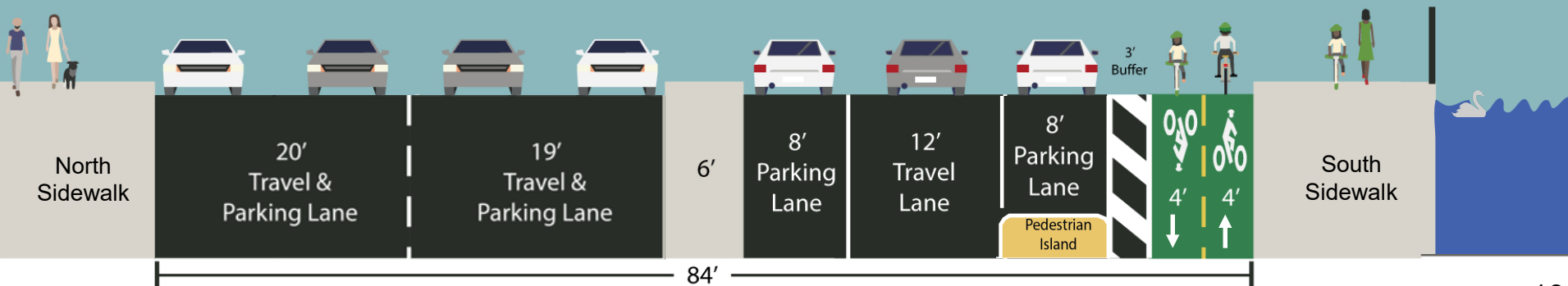
- Convert angled parking to parallel parking
- Establish parking along the waterfront
- Protect cyclists with parked cars
- Shorten crossing distances for pedestrians



Existing Conditions



Proposed Design



③ EMMONS AVE: Coyle St to Brigham St

Existing Conditions

Emmons Ave at Bragg St, facing east



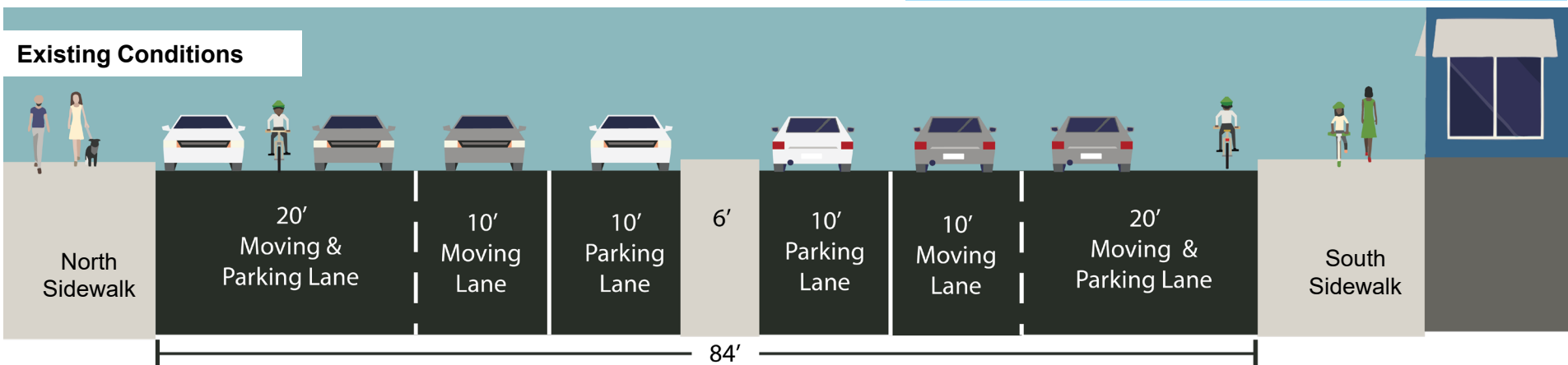
3 PROTECTED TWO-WAY BICYCLE PATH

Emmons Ave: from Coyle St to Brigham St (two blocks)

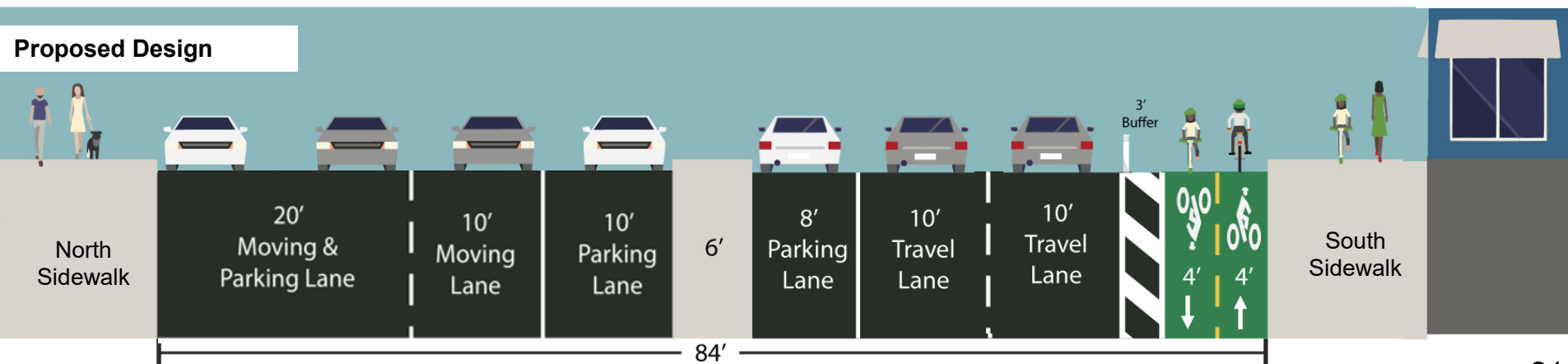
- Maintain two lanes for vehicles approaching Belt Pkwy
- Bike path separated from traffic with bollards
- Create clear connection to greenway & new park entrance



Existing Conditions



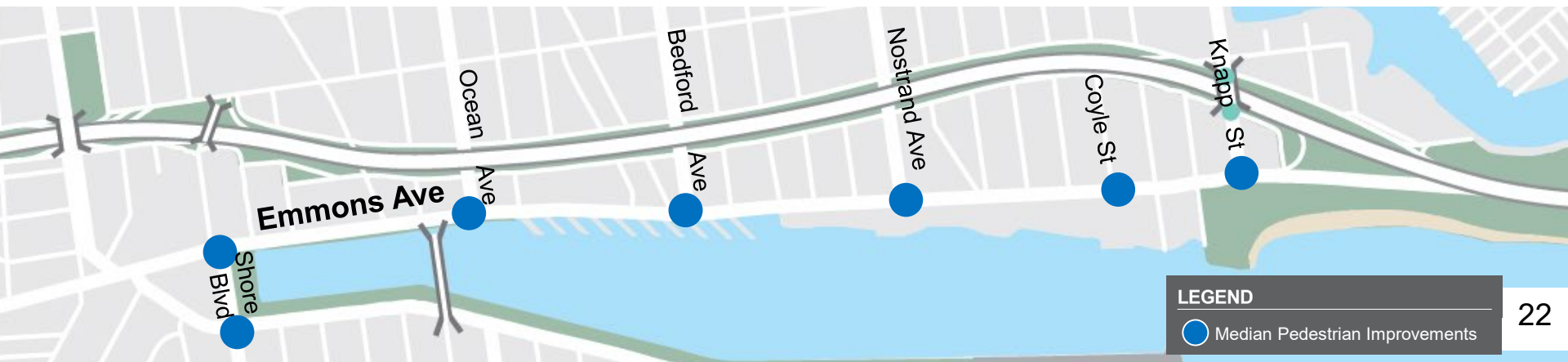
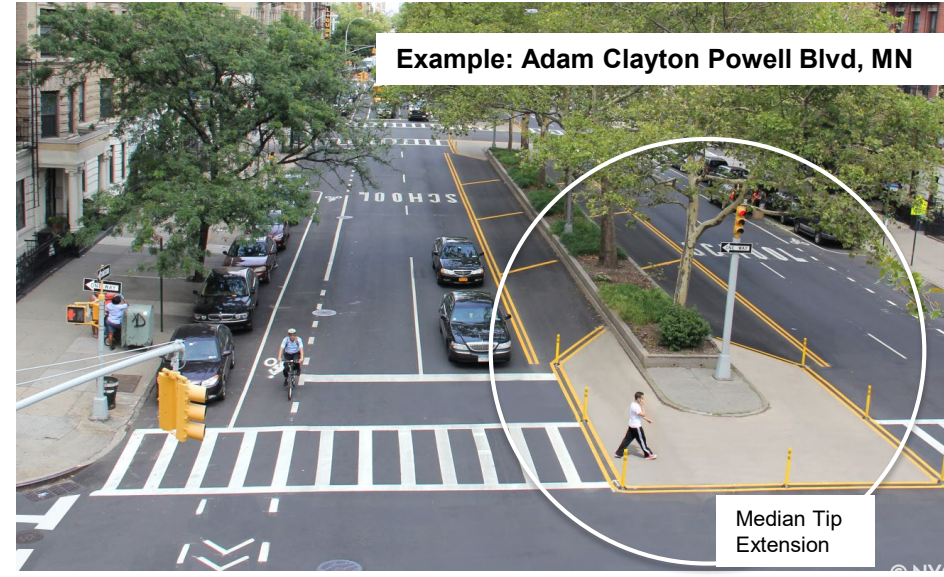
Proposed Design



PEDESTRIAN IMPROVEMENTS

Median Tip Extensions at Signalized Intersections

- Median tip extensions shorten crossing distance, create waiting area for pedestrians
- Upgraded crosswalks improve visibility
- Signal timing changes improve pedestrian safety at key locations



Making It Work

3

LOADING AND CURB ACCESS

Driveways

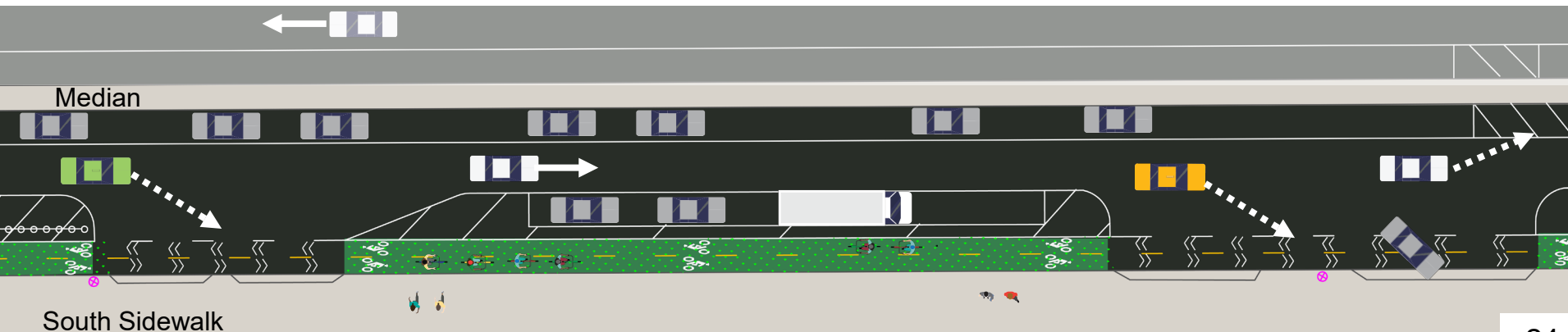
- Driveway access is maintained and indicated with dashed markings

Curb Access

- Design preserves loading and access along the south side of the street
- No Standing zones/markings near piers will provide flexibility for access

Curb Management Tools

- Potential for loading zones, parking regulation changes for pickup/drop-off, metering



PARKING DESIGN TYPICAL

Maintain Parking

- Convert angled parking to two rows of parallel parking

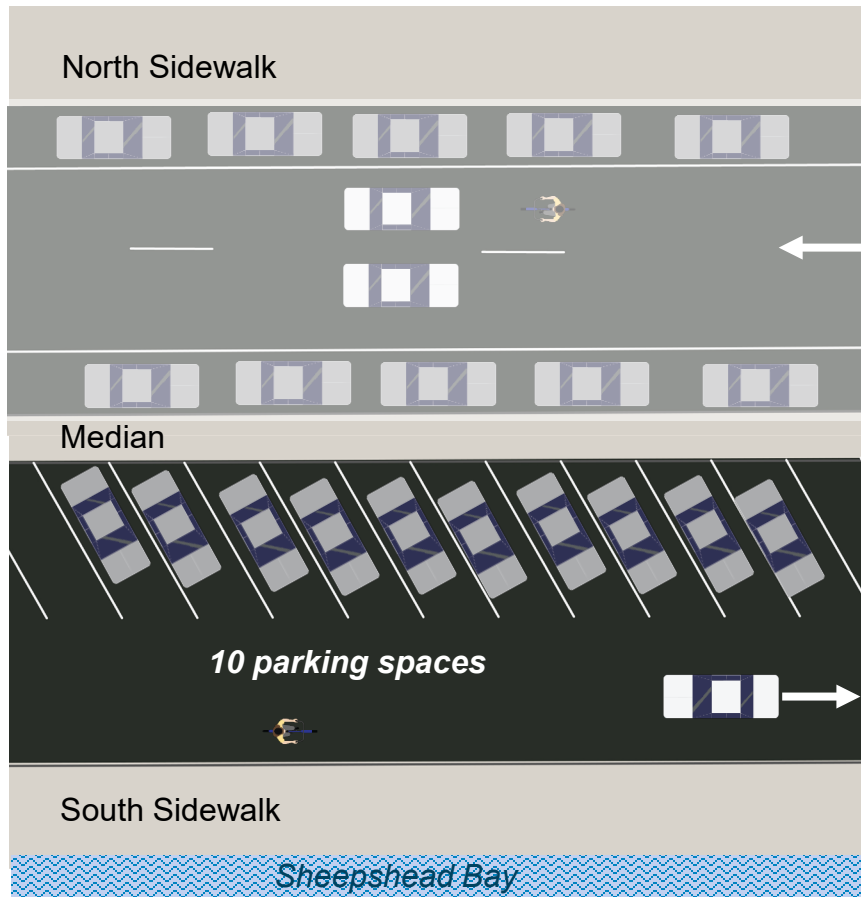
Maintain Traffic Flow

- Maintains eastbound travel lane

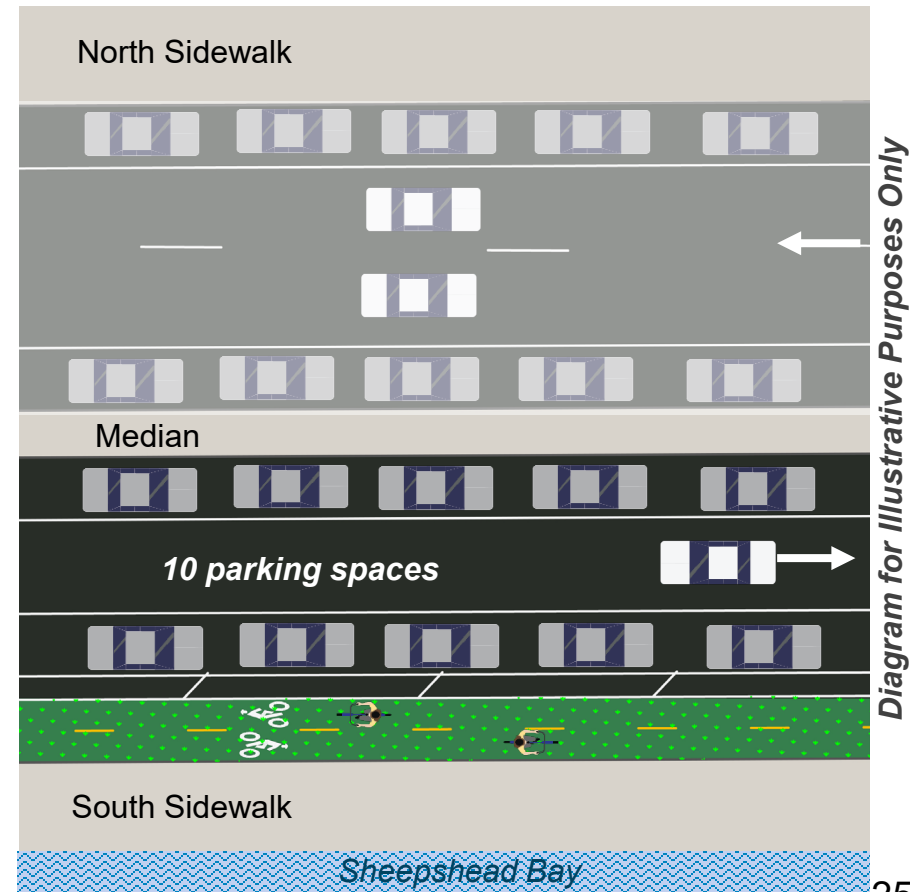
Cyclist Safety

- Cyclists are separated from traffic by parked cars

Existing



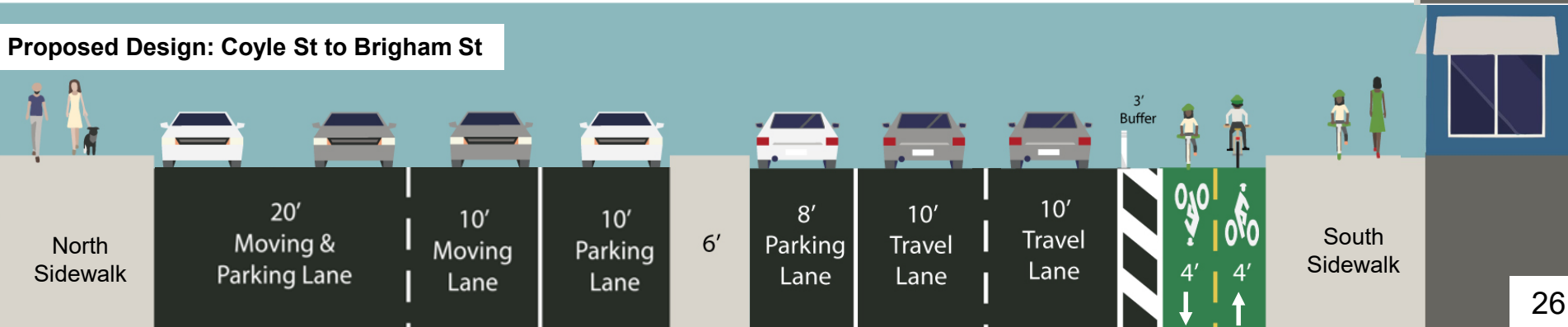
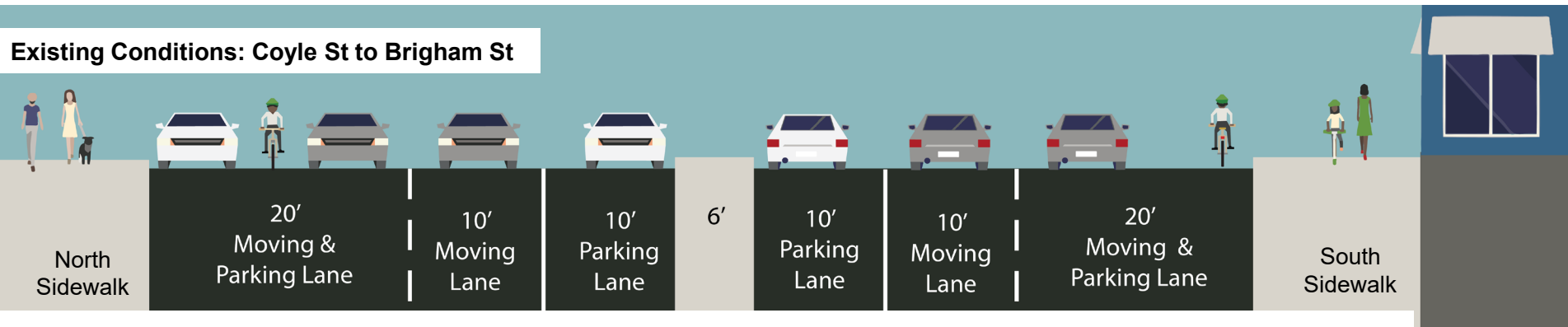
Proposed



TRAFFIC FLOW

Improvements

- Traffic analysis conducted taking into account both summer and fall (school) volumes
- Maintain two lanes for vehicles approaching Belt Pkwy
- Install left turn lane and LPI at Nostrand Ave
- Implement signal timing adjustments at Shore Blvd to reduce congestion and improve pedestrian safety



Safety – Complete Street Redesign

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

-15% drop in all crashes with injuries

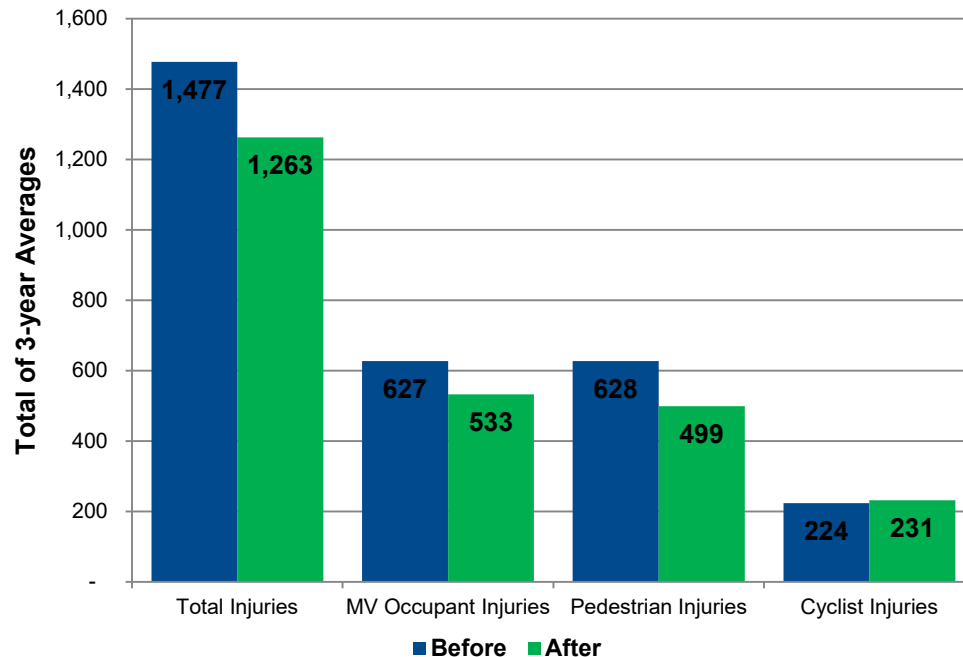
-21% drop in pedestrian injuries

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



111th St., Queens

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

Summary




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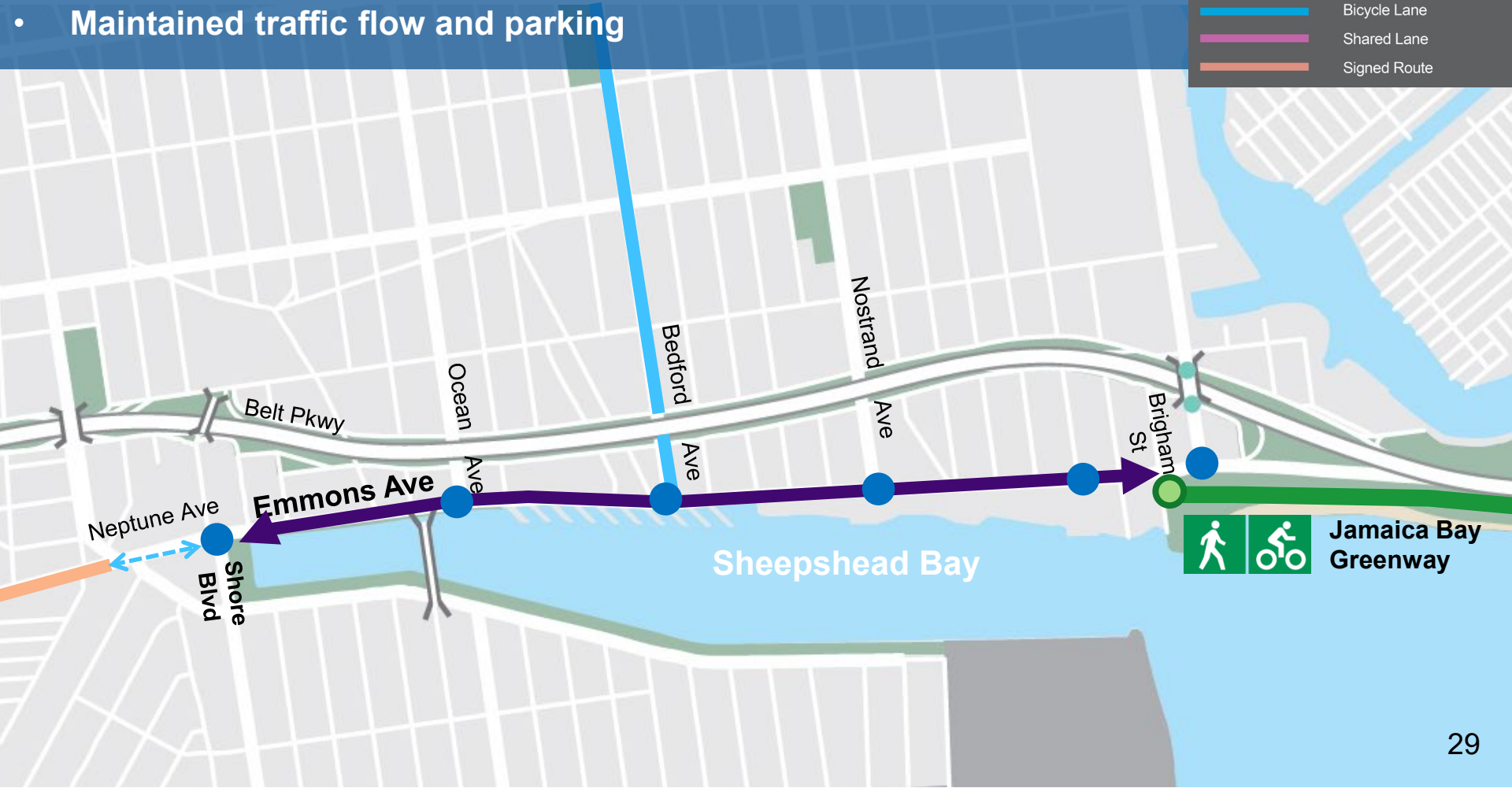
Improved Bike and Pedestrian Safety and Access to Jamaica Bay Greenway

Project Benefits

- New two-way parking-protected bicycle lane
- Safer pedestrian crossings
- Reduced conflicts between bicycles, pedestrians, moving vehicles
- Maintained traffic flow and parking

LEGEND

	Proposed Bicycle Route
	Pedestrian Improvements
Existing Bicycle Facilities	
	Protected Bicycle Path
	Bicycle Lane
	Shared Lane
	Signed Route



Questions?
THANK YOU!



NYC DOT



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