



FLATBUSH AVE SAFETY IMPROVEMENTS GRAND ARMY PLAZA TO EMPIRE BLVD

MAY 2019



Background

1

FLATBUSH AVENUE

Vital transportation corridor for all modes

1,100+ vehicles in the peak hour

NYC's 13th busiest bus route (out of 182 citywide)

More than 500 bikes on a weekend day, more than 350 on a weekday

Major cultural destinations attract pedestrians including Prospect Park, Brooklyn Botanic Garden, Prospect Park Zoo, Brooklyn Public Library, Grand Army Plaza



Direct connection from Downtown Brooklyn. Manhattan and Brooklyn bridges to :

- Prospect Lefferts Gardens
- Flatbush and East Flatbush
- Neighborhoods in southern Brooklyn

FLATBUSH AVENUE

Safety Concerns

Flatbush Ave

Vision Zero Priority Corridor

top 33% of borough corridors in KSI/mile

Only street adjacent to Prospect Park that is a Vision Zero Priority Corridor

BP Adams Request for Traffic Calming

Flatbush Ave (Grand Army Plaza – Ocean Ave), BK
Injury Summary, 2013-2017 (5 Years)

	Total Injuries	Severe Injuries	Fatalities
Pedestrian	15	1	1
Bicyclists	5	2	0
Motor Vehicle Occupant	201	6	0
Total	221	9	1

2013 – 2019 Fatalities: 1



Flatbush Ave

SAFETY – Protected Bike Lanes

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

-15% drop in all crashes with injuries

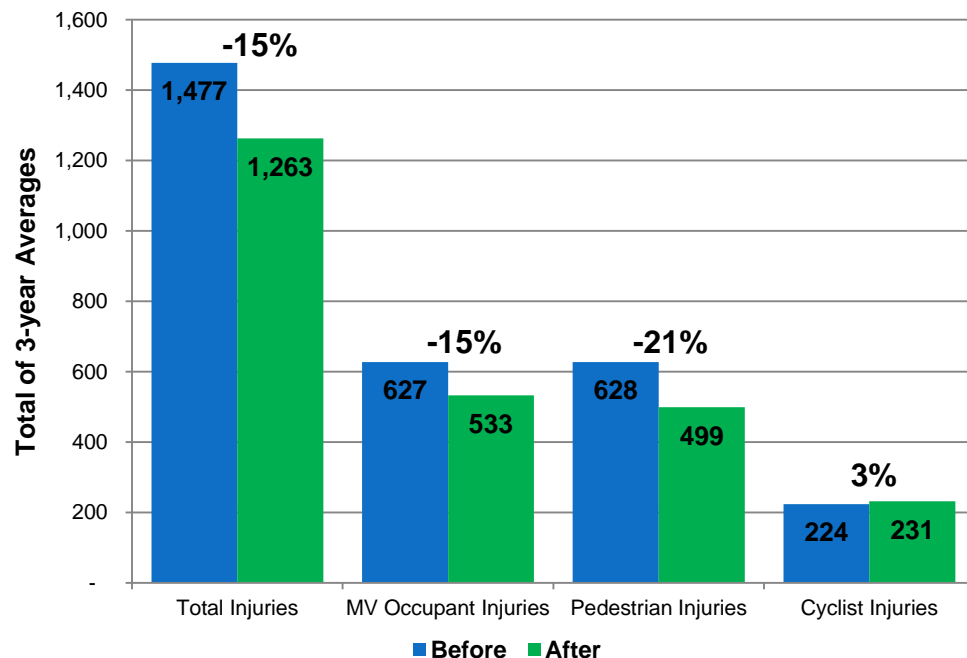
-21% drop in pedestrian injuries

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

BIKING IN BROOKLYN

Increased Ridership and Expanded Network

The number of people in Brooklyn biking to work increased

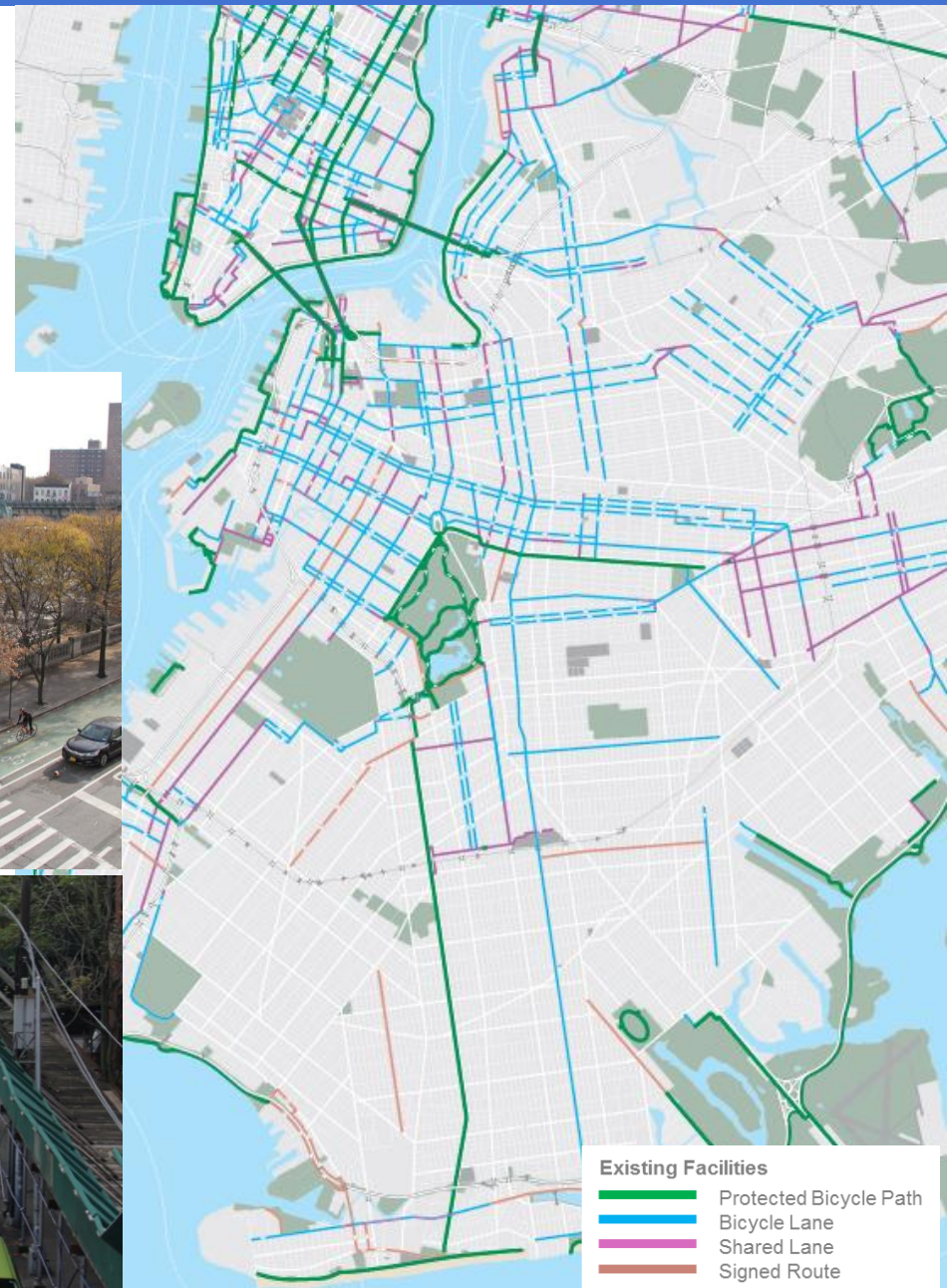
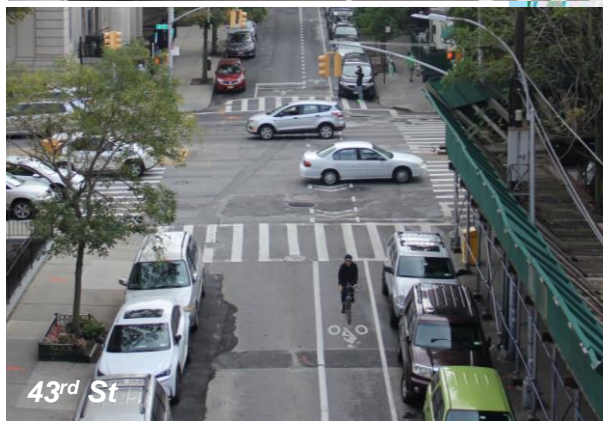
+ 65%

from 2011 – 2016

+ 65 lane miles

have been added to the bike network in Brooklyn in the past 3 years

2016 – 2018



Total Number of Cyclists in Brooklyn
US Census ACS – Journey to Work
(3 year rolling average)

BIKING IN BROOKLYN

Prospect Park Perimeter

Edge condition is ideal for two-way protected bicycle lanes that would:

- Provide 2-way routes around the park, in contrast to one-way park loop
- Provide alternative routes when park is closed overnight
- Increase access to park entrances – existing and future Parks' capital work

Existing and Potential Future Bike Infrastructure

Prospect Park West (2010)

Flatbush Ave *Proposed*

Ocean Ave *In Development*

Parkside Ave *Potential*

Prospect Park Southwest *Potential*

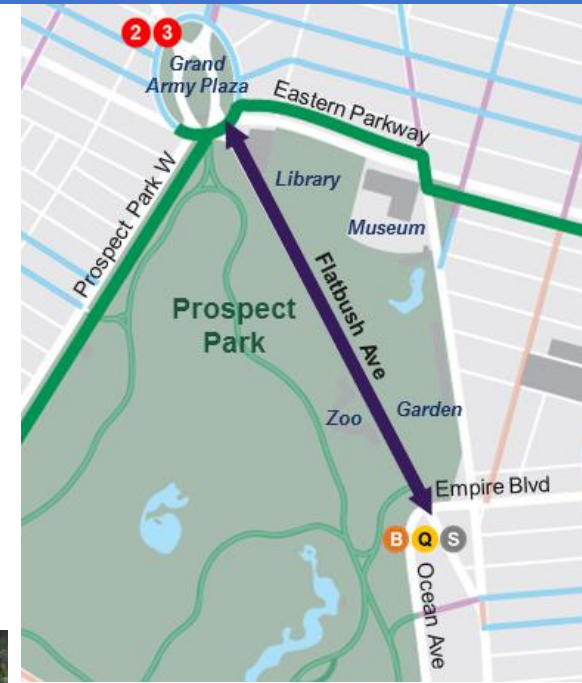


FLATBUSH AVENUE PROJECT GOALS

- Improve safety for all road users
- Improve bus rider experience
- Maintain traffic flow
- Increase bicycle access to park and on-street bike network
- Preserve parking while encouraging turnover



Flatbush Ave



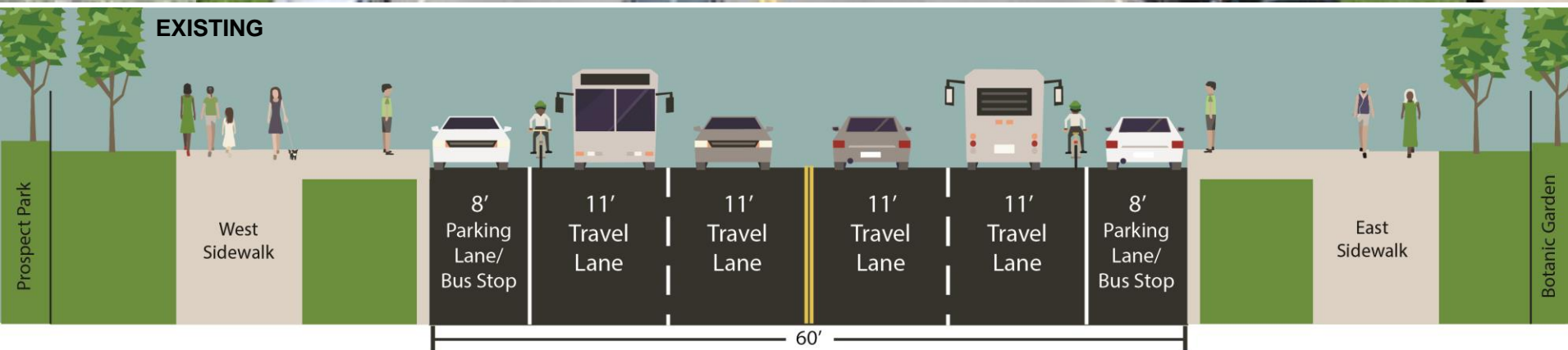
Flatbush Avenue Proposal

2

FLATBUSH AVENUE



Flatbush Ave



- 2 Standard moving lanes in each direction
- Parking on both curbs
- Parks and open space on each side
- B41 Local and Limited routes
- Designated Local Truck Route



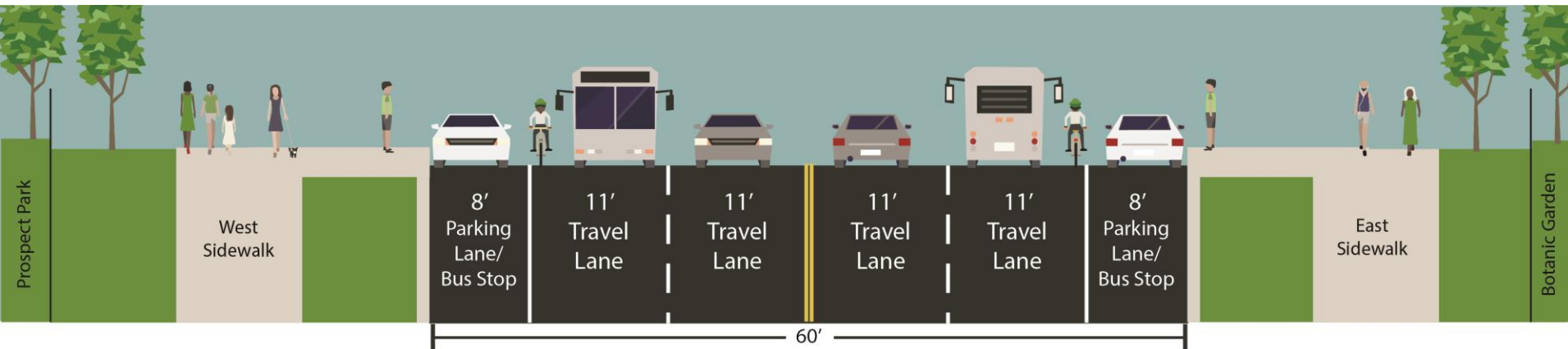
Bicycle Counts (12-hour)
 Weekday – 358 bikes
 Weekend – 510 bikes
 *34% bikes on sidewalk



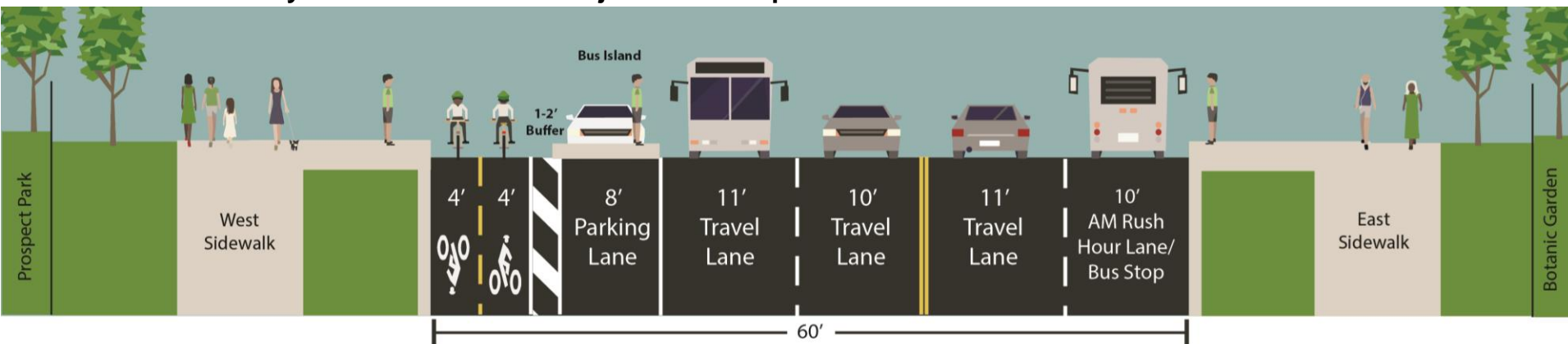
Vehicle Counts
 NB Peak 7am 1,160 vehicles
 SB Peak 5pm 1,110 vehicles

PROPOSED DESIGN – TYPICAL

EXISTING

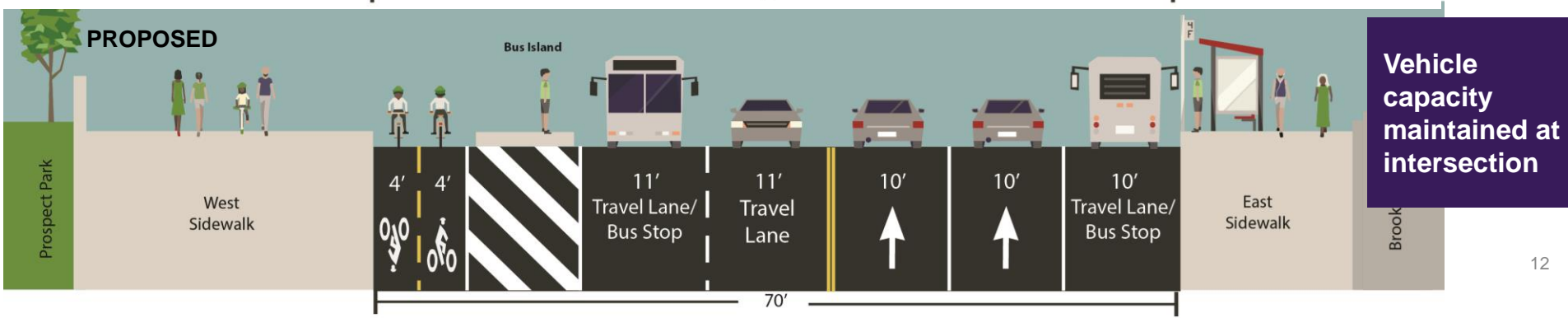
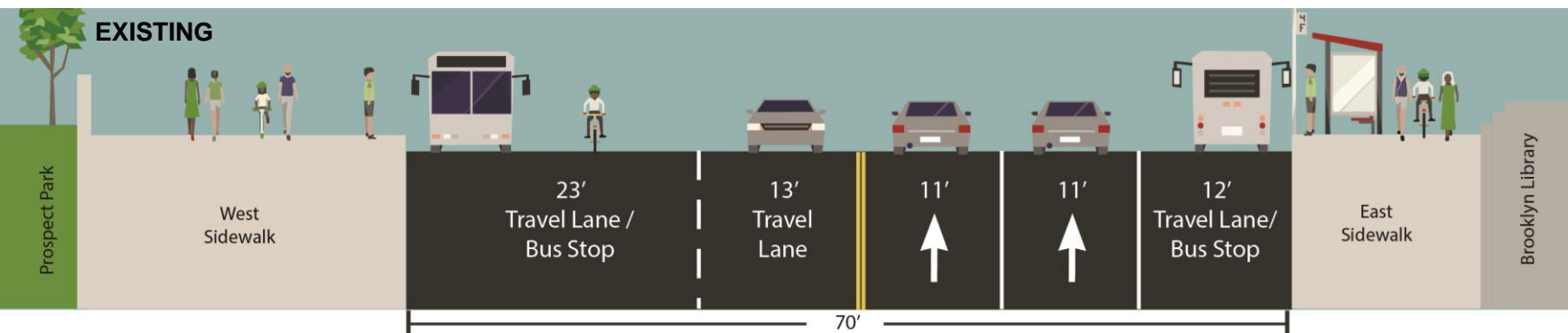
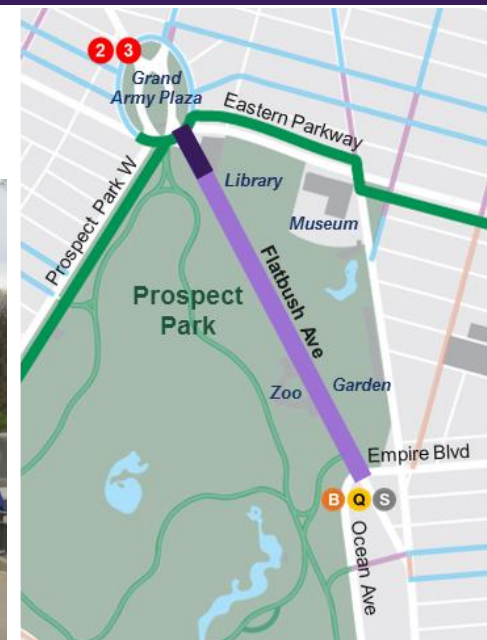


PROPOSED – Two way Protected Bike Lane adjacent to Prospect Park

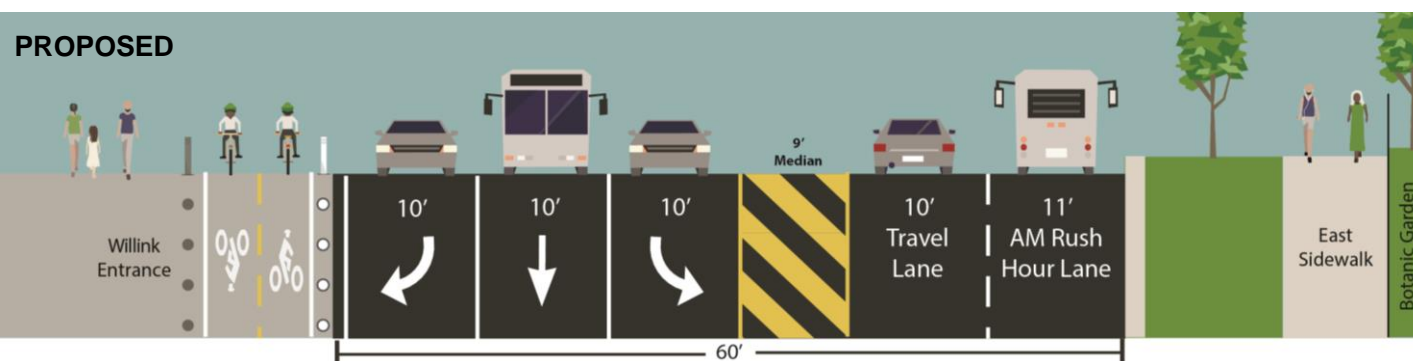
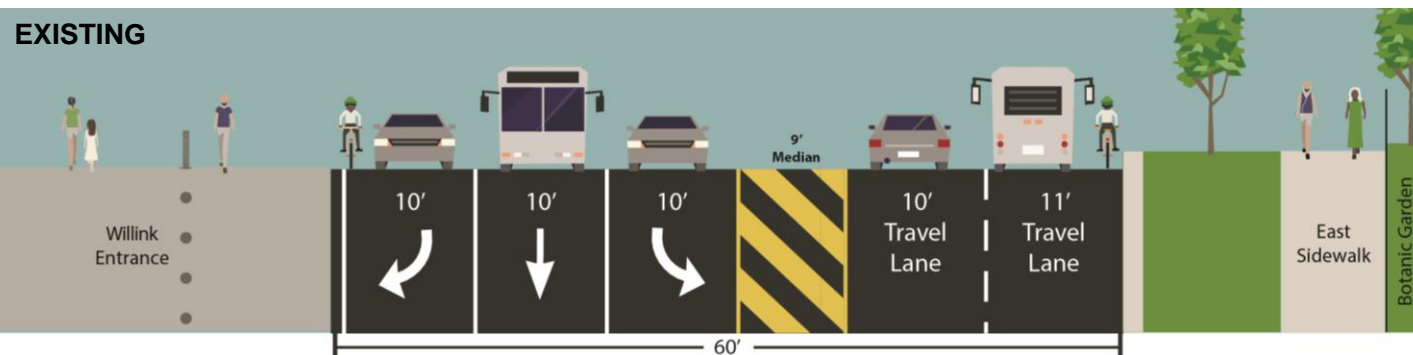
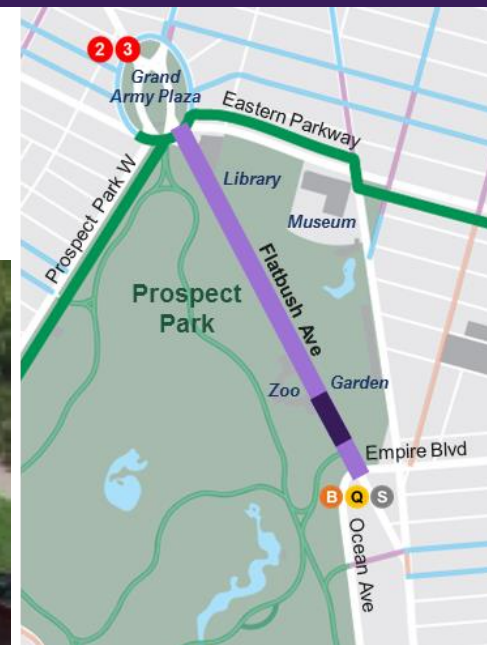


- Incorporates bus improvements including boarding islands (two southbound stops)
- Provides direct bike connection to Grand Army Plaza, separate from vehicles and pedestrians
- Peak period travel lane on east curb maintains capacity when needed. Parking is preserved off peak and overnight
- Design is compatible with Parks' sidewalk and entrance capital work

PROPOSED DESIGN At Grand Army Plaza



PROPOSED DESIGN At Willink Entrance

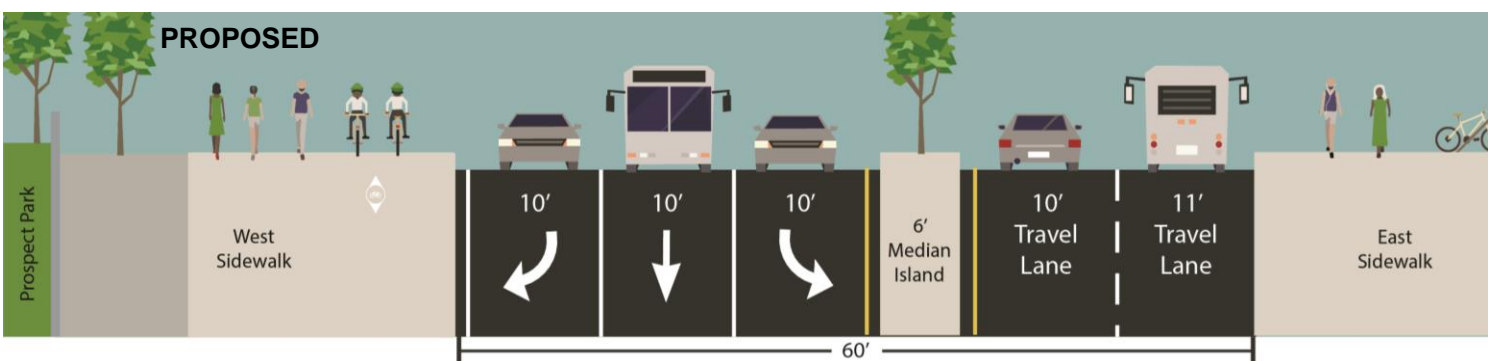
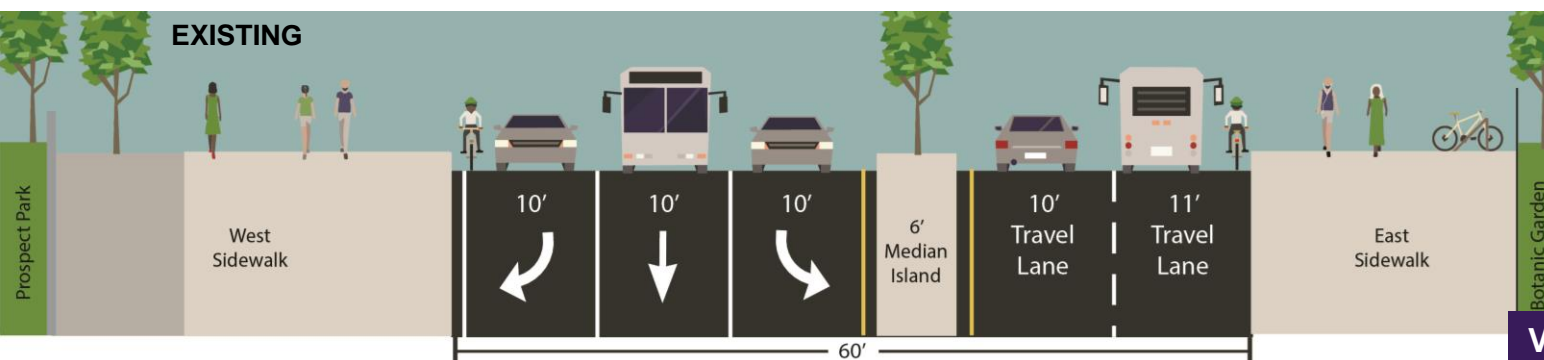
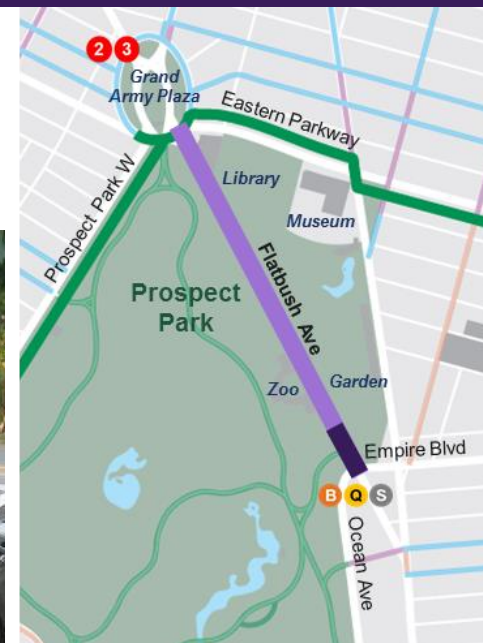
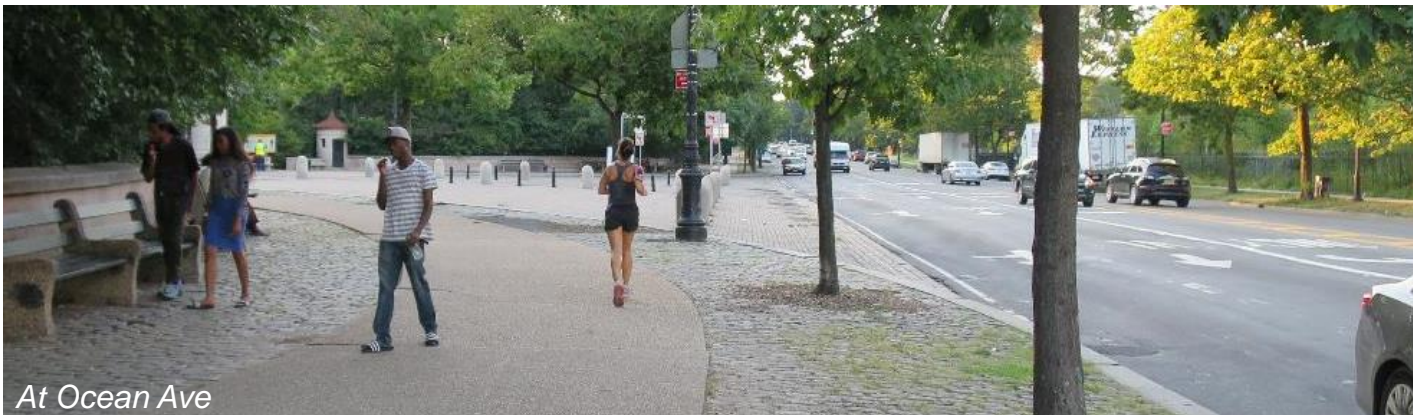


Bike lane separated from pedestrian space with existing bollards

Parks driveway access maintained

Surface treatment to be determined

PROPOSED DESIGN At Ocean Ave



**Vehicle capacity
maintained at
intersection**

**Connects to Parks'
future capital work**

**Bikes wait on sidewalk
before crossing
Empire Blvd/Ocean
Ave**

PROPOSED DESIGN

Design Elements

Parking Protected Bike Lane

Precedent: Prospect Park West (2010)

- Weekday cycling tripled after 1 year
- Vehicle speeding reduced
- Crashes reduced by 16%

Bus Boarding Islands and Protected Bike Lanes

Precedent: Seaview Ave (2017)

- Provide customers with increased waiting space
- Reduce lag time at each stop – buses stay in the moving lane
- Separate space for bus riders and cyclists
- Pedestrian crossing markings in bike lanes
- ADA compliant design



FLATBUSH AVENUE

Project Summary

Increases safety and improves conditions for all road users by:

- Reducing speeding
- Maintaining traffic capacity
- Shortening pedestrian crossings
- Providing protected space for cyclists
- Adding bus boarding islands and reducing lag time at bus stops
- Preserving parking while encouraging turnover

Redesigns corridor, humanizes roadway adjacent to Prospect Park, creates a more neighborhood scale experience



Flatbush Ave

THANK YOU!

Questions?



NYC DOT



NYC DOT



nyc_dot



NYC DOT