FLATBUSH AVE SAFETY IMPROVEMENTS
GRAND ARMY PLAZA TO EMPIRE BLVD
MAY 2019
Background
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 Ave

**Vision Zero Priority Corridor**

*top 33% of borough corridors in KSI/mile*

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

**BP Adams Request for Traffic Calming**

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**Flatbush Ave (Grand Army Plaza – Ocean Ave), BK**

Injury Summary, 2013-2017 (5 Years)

<table>
<thead>
<tr>
<th></th>
<th>Total Injuries</th>
<th>Severe Injuries</th>
<th>Fatalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedestrian</td>
<td>15</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Bicyclists</td>
<td>5</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Motor Vehicle Occupant</td>
<td>201</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>221</strong></td>
<td><strong>9</strong></td>
<td><strong>1</strong></td>
</tr>
</tbody>
</table>

2013 – 2019 Fatalities: 1
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)
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 Avenue Proposal
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

- 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

EXISTING

Prospect Park
West Sidewalk

23’ Travel Lane / Bus Stop

13’ Travel Lane

11’ Travel Lane

11’ Travel Lane / Bus Stop

70’

PROPOSED

Prospect Park
West Sidewalk

4’ 4’

0’

0’

0’

10’ Travel Lane

10’ Travel Lane

10’ Travel Lane / Bus Stop

70’

Vehicle capacity maintained at intersection
PROPOSED DESIGN
At Willink Entrance

EXISTING

PROPOSED

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
THANK YOU!

Questions?