

# St. Johns Pl. / Sterling Pl.

## Corridor Safety Improvements

2016

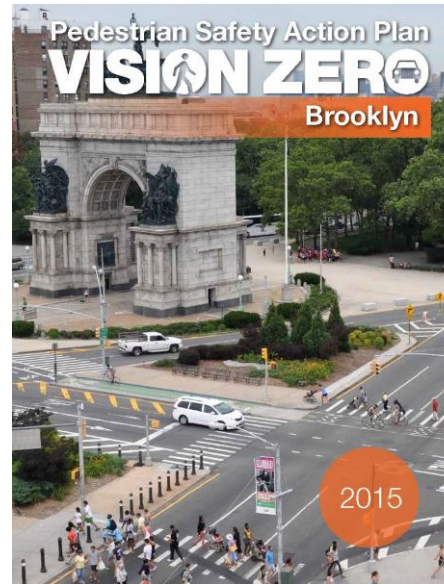




# Vision Zero Priority Corridors / Areas

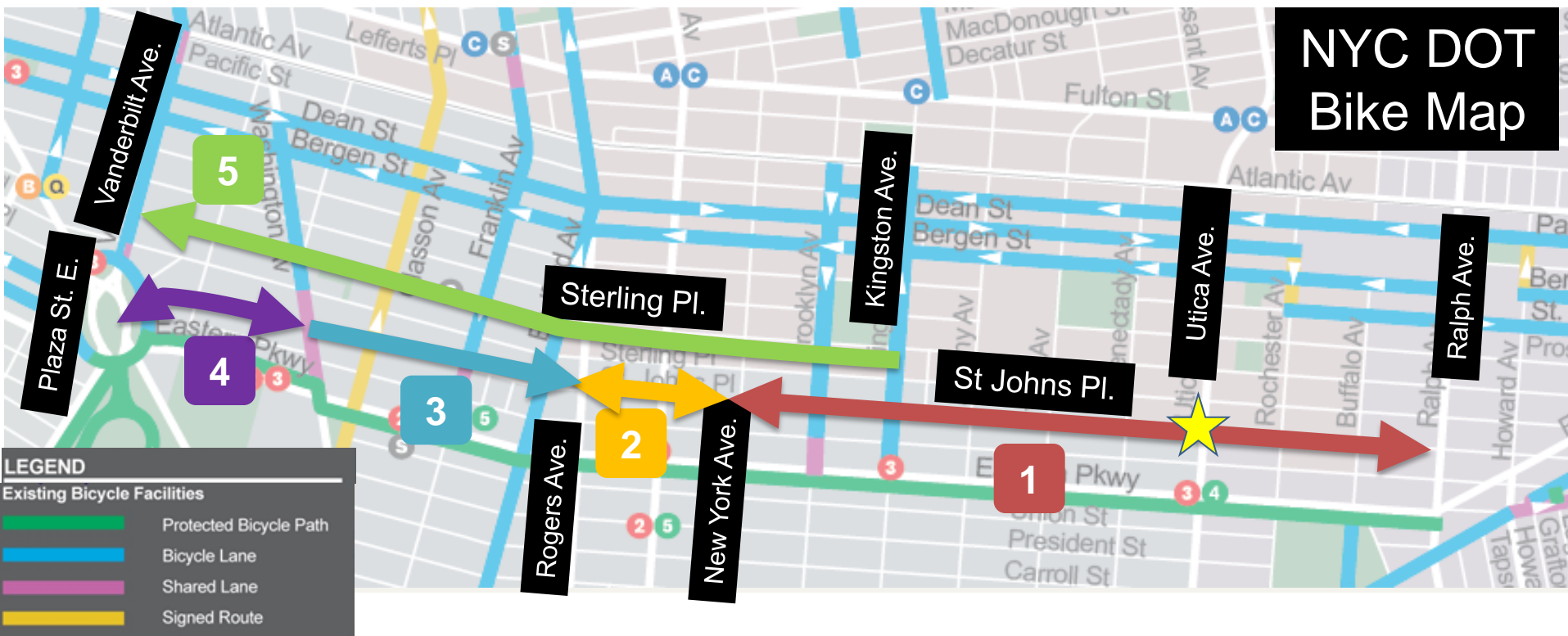
## Vision Zero

- Multi-agency effort to reduce traffic fatalities in NYC
- Borough Action Plans released in 2015
- Priority Intersections, Corridors, and Areas identified
  - **St Johns Pl & Sterling Pl** are in a Priority Area for Brooklyn. St. Johns Pl & Utica Ave is a priority intersection.



# Project Location

- Residential and commercial land use
- St. Johns Pl. is wide, two-way street (50 ft.) for majority of project area
- Existing bicycle routes (Vanderbilt Ave, Plaza St. E., Washington Ave, Classon Ave, Franklin Ave, Bedford Ave, Brooklyn Ave, Kingston Ave)
- B45 bus runs on St. Johns Pl. and Sterling Pl.



# Safety Data: Project Need

- 680 total injuries in project area
- Severe injuries concentrated in areas where street widens to 50 ft.
- Radar speeds show up to 47% of cars traveling over speed limit
- 31.5 % of motor vehicle crashes are rear-end crashes

## Injury Summary 2010-2014 (5 years)

St Johns PI (Plaza St to Ralph Ave)

Sterling PI (Vanderbilt Ave to Kingston Ave)

	Total Injuries	Severe Injuries	Fatalities	KSI
Pedestrian	167	19	0	19
Bicyclist	59	5	0	5
Motor Vehicle Occupant	454	23	0	23
Total	680	47	0	47
Fatalities, 01/01/2010-12/31/2016 : 1				

Source: Fatalities: NYCDOT  
Injuries: NYSDOT  
KSI: Persons Killed or Severely Injured

19 severe ped injuries  
5 severe bicyclist injuries

47 severe injuries

1 fatality in 2015  
(motor vehicle occupant)



# Safety Data: Utica Ave. & St. Johns Pl.

- Vision Zero Priority Intersection with 7 pedestrian severe injuries
  - 3<sup>rd</sup> highest number of pedestrian severe injuries at a single intersection in BK
  - Majority of pedestrians injured were crossing with the signal in their favor

## St Johns Pl At Utica Ave, BK

### Injury Summary, 2010-2014 (5 Years)

	Total Injuries	Severe Injuries	Fatalities	KSI
Pedestrian	19	7	0	7
Bicyclist	1	0	0	0
Motor Vehicle Occupant	34	0	0	0
Total	54	7	0	7

19 pedestrian injuries  
7 severe ped injuries

Fatalities, 01/01/2010-11/30/2015 : None

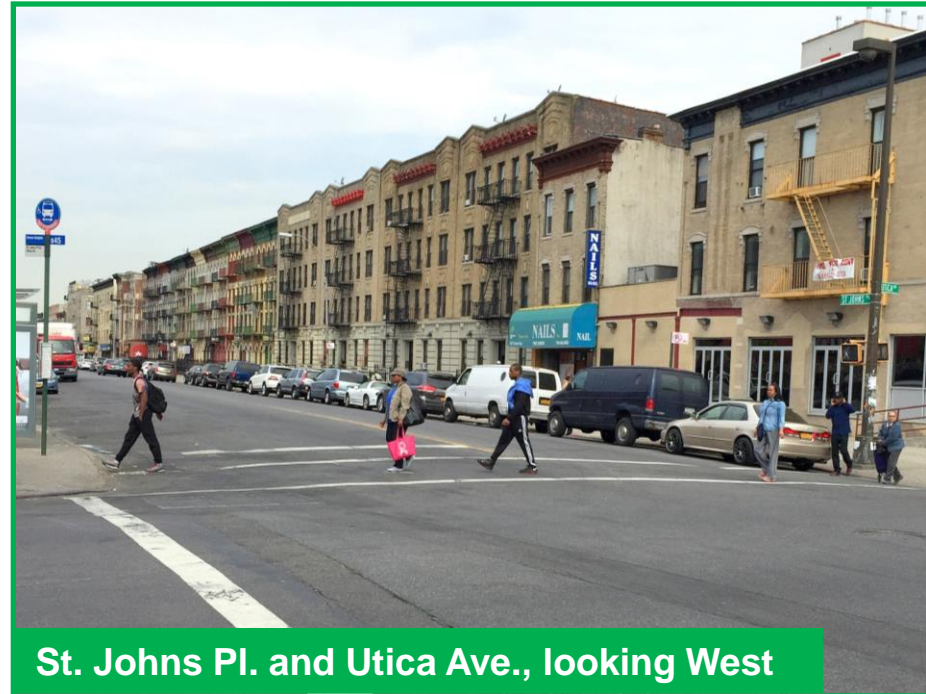
Source: Fatalities: NYCDOT  
Injuries: NYSDOT  
KSI: Persons Killed or  
Severely Injured

# Existing: Utica Ave & St. Johns Pl

- Long crossing distances
- Busy transfer point between B45 (St. Johns) and B46 (Utica) buses
- High pedestrian volumes, especially crossing St. Johns Pl.
- Conflicts between left turning vehicles

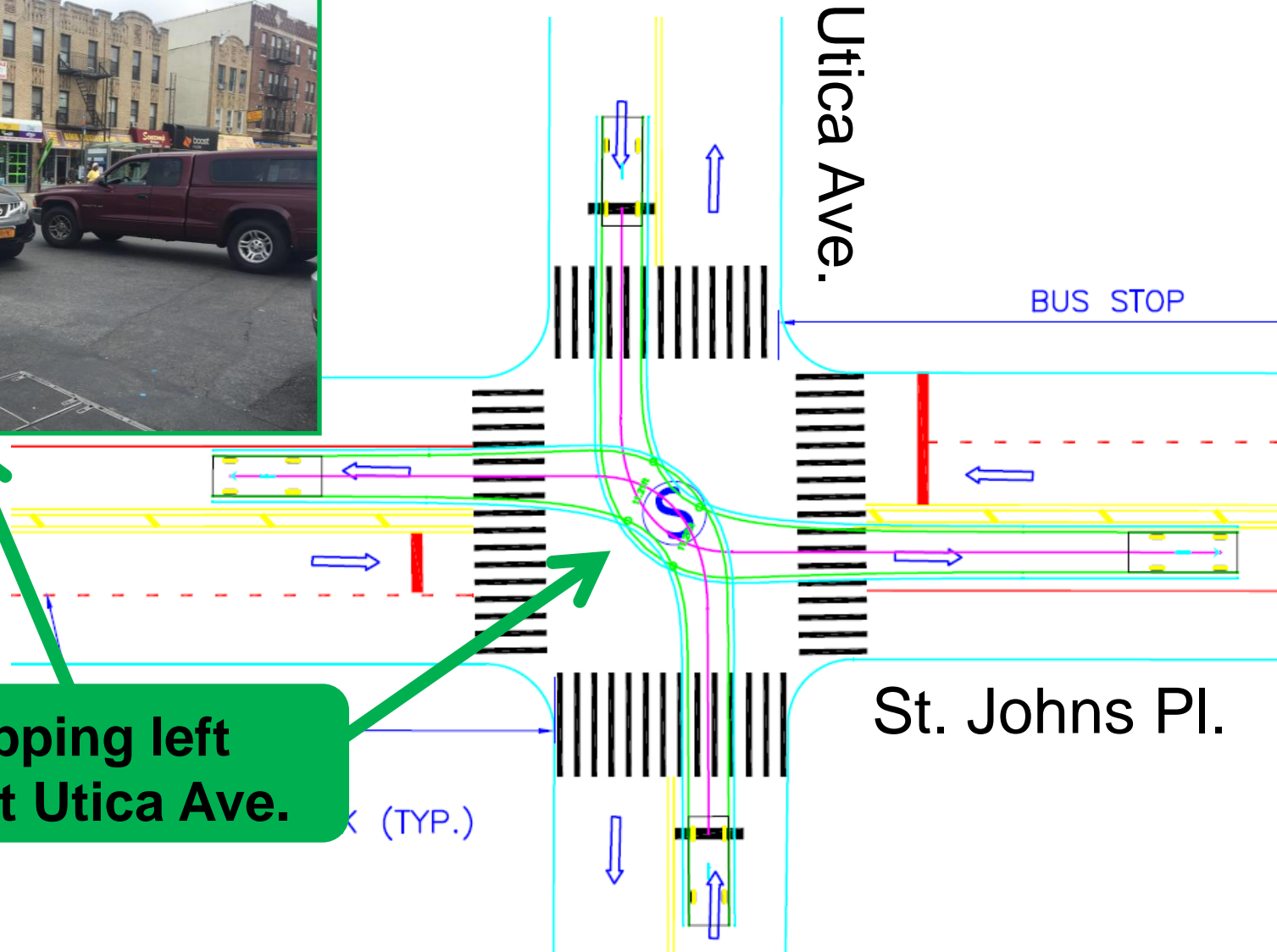


St. Johns Pl. and Utica Ave., looking East



St. Johns Pl. and Utica Ave., looking West

# Left Turn Conflicts: Utica Ave & St. Johns Pl



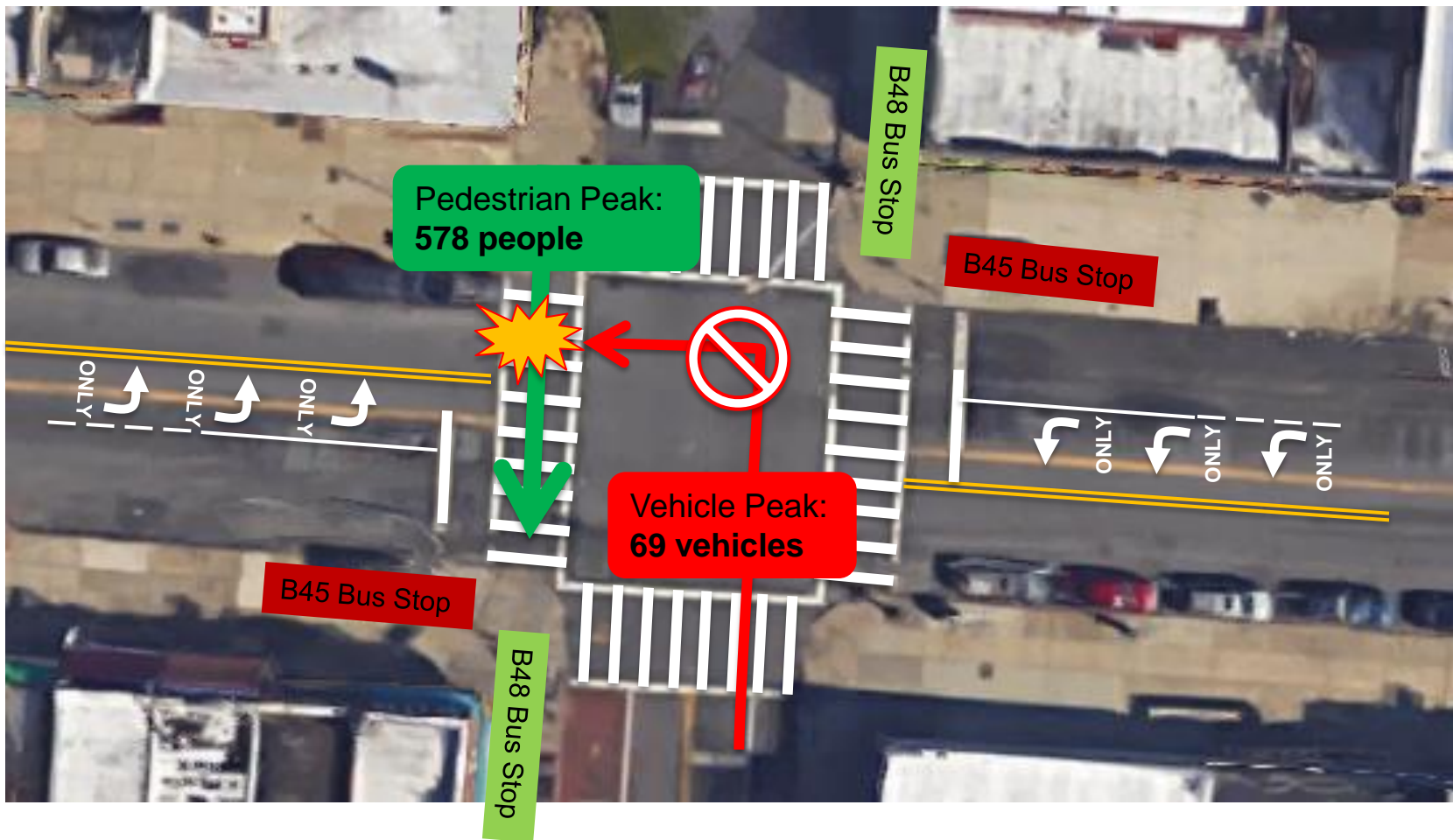
**Overlapping left  
turns at Utica Ave.**

X (TYP.)

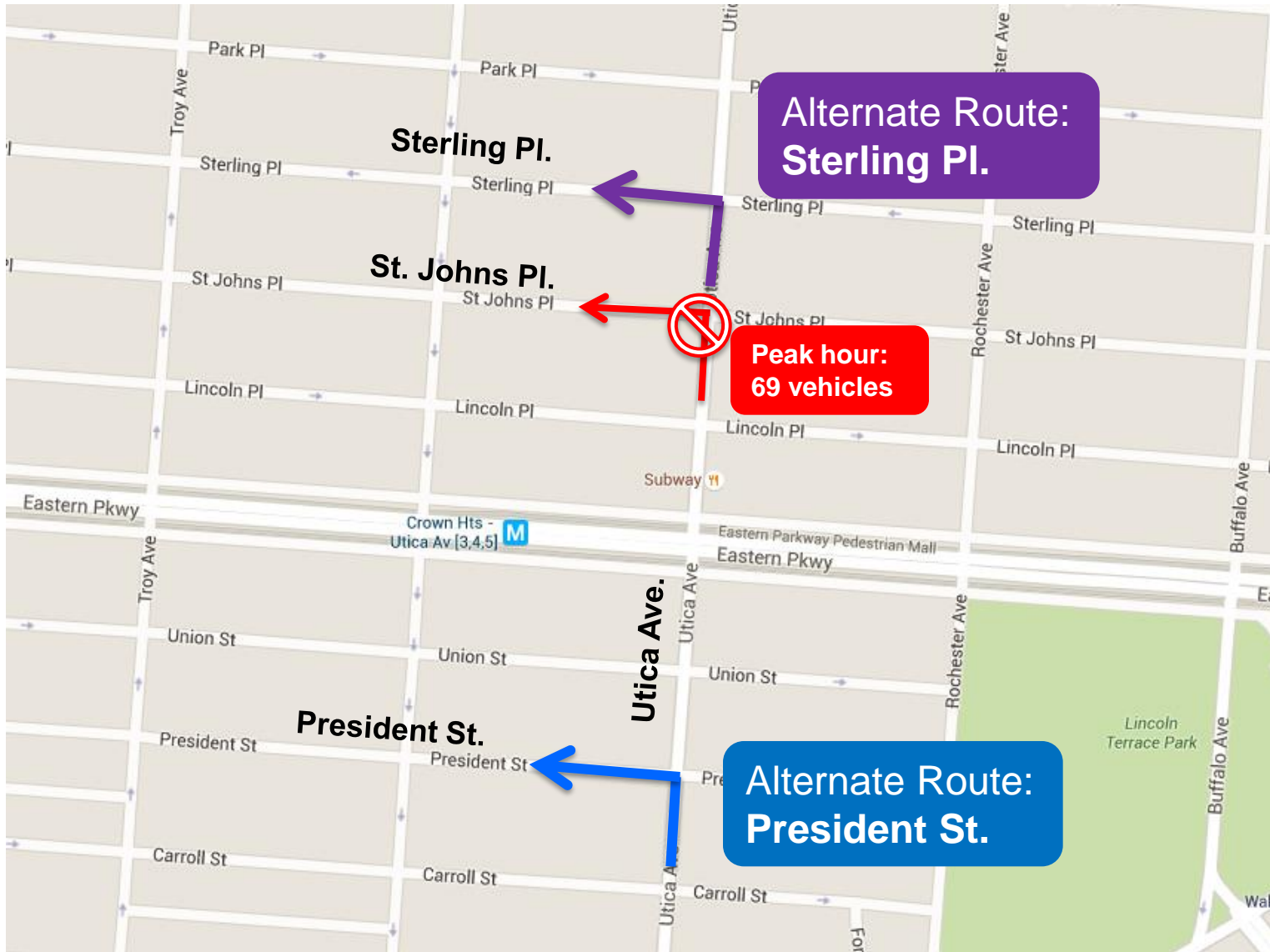


# Proposal: St. Johns Pl. and Utica Ave

- Add turn bays on St. Johns Pl. for EB and WB lefts onto Utica Ave.
- Restrict NB left turns from Utica Ave. to WB St. Johns Pl. (69 vehicles at peak)
- No parking loss

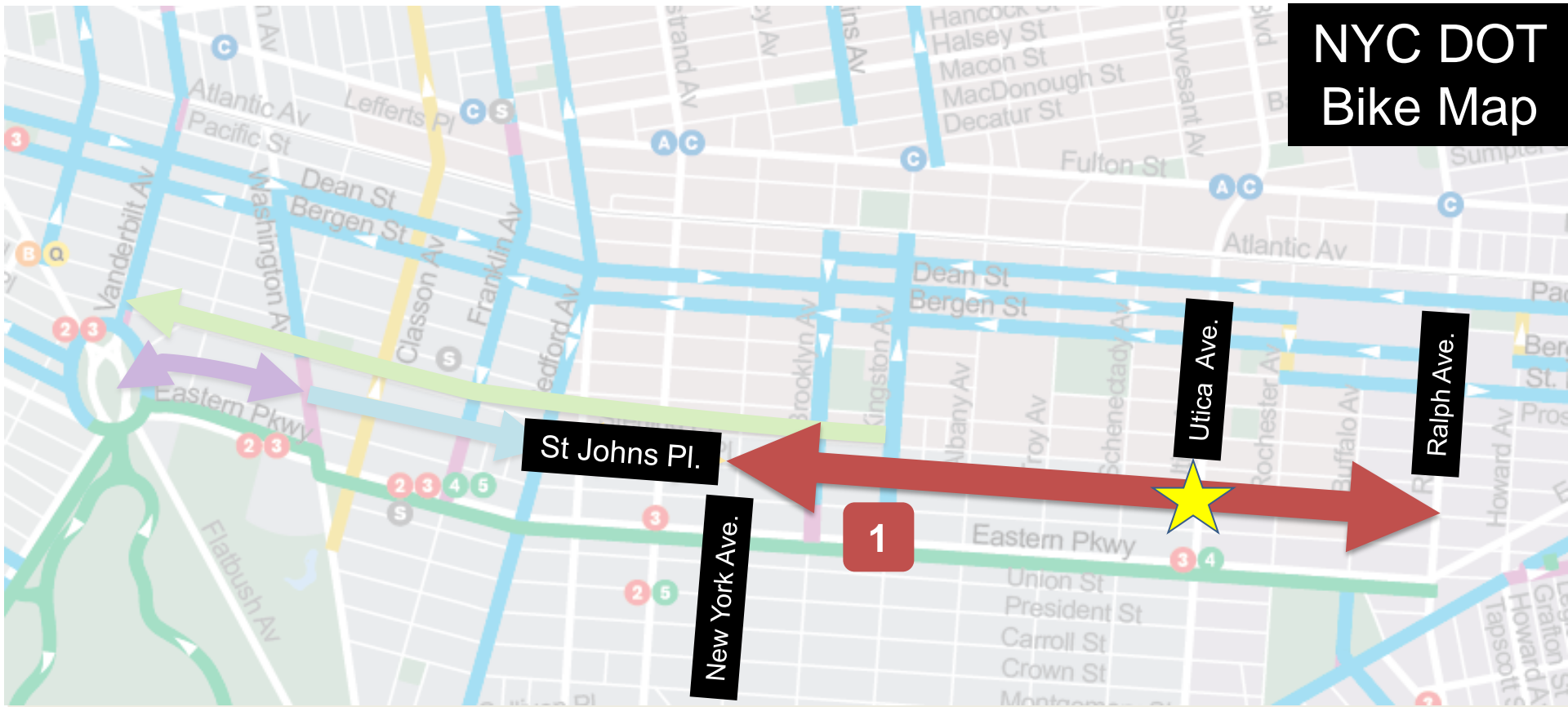


# Proposal: Alternate Routes



# Project Location

NYC DOT  
Bike Map





# Existing Conditions: St. Johns Pl.

## 1 Ralph Ave. to New York Ave.

50 ft. wide street with one lane in traveling each direction



4 ft. median exists btwn Utica Ave. and Ralph Ave.



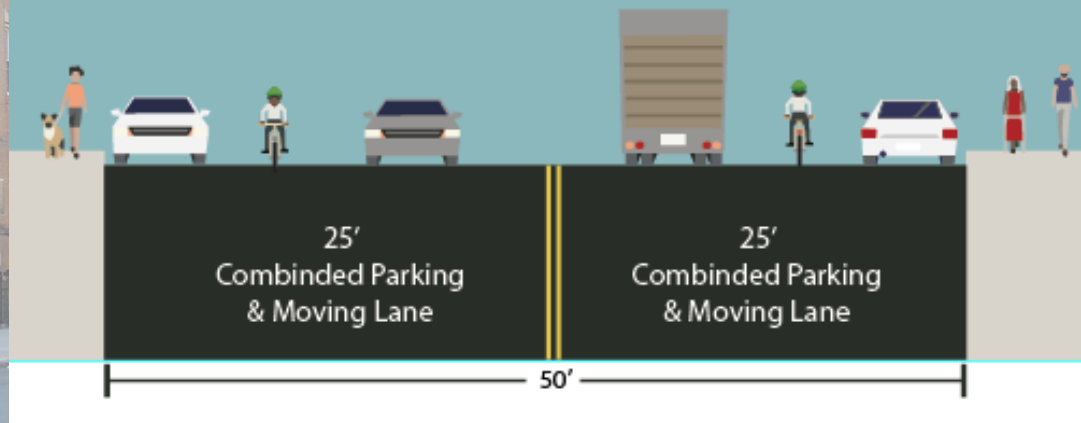


# Proposed: St. Johns Pl.

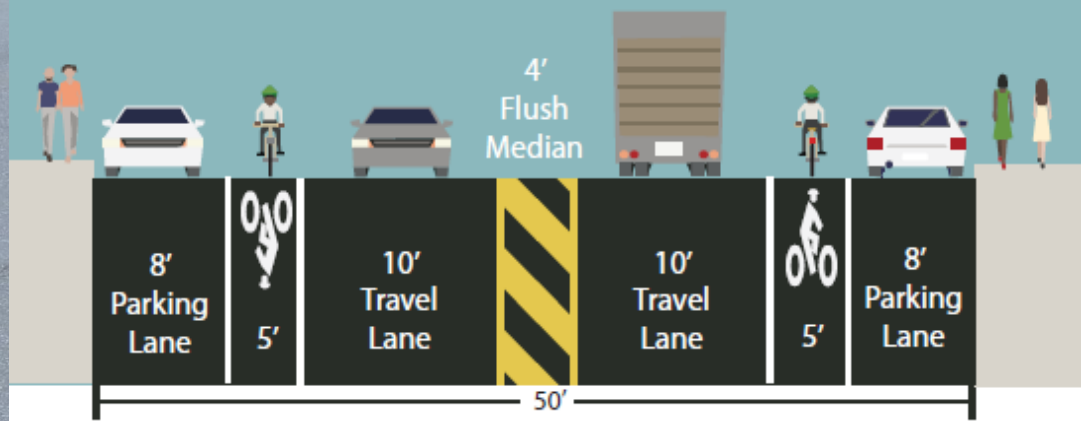
## 1 Ralph Ave. to New York Ave.

- Add 4 ft. painted center median
- Mark bicycle lanes in both directions
  - Connects to existing routes on Brooklyn Ave., Kingston Ave., planned route on St. Johns Pl. in CB 16

Existing



Proposed



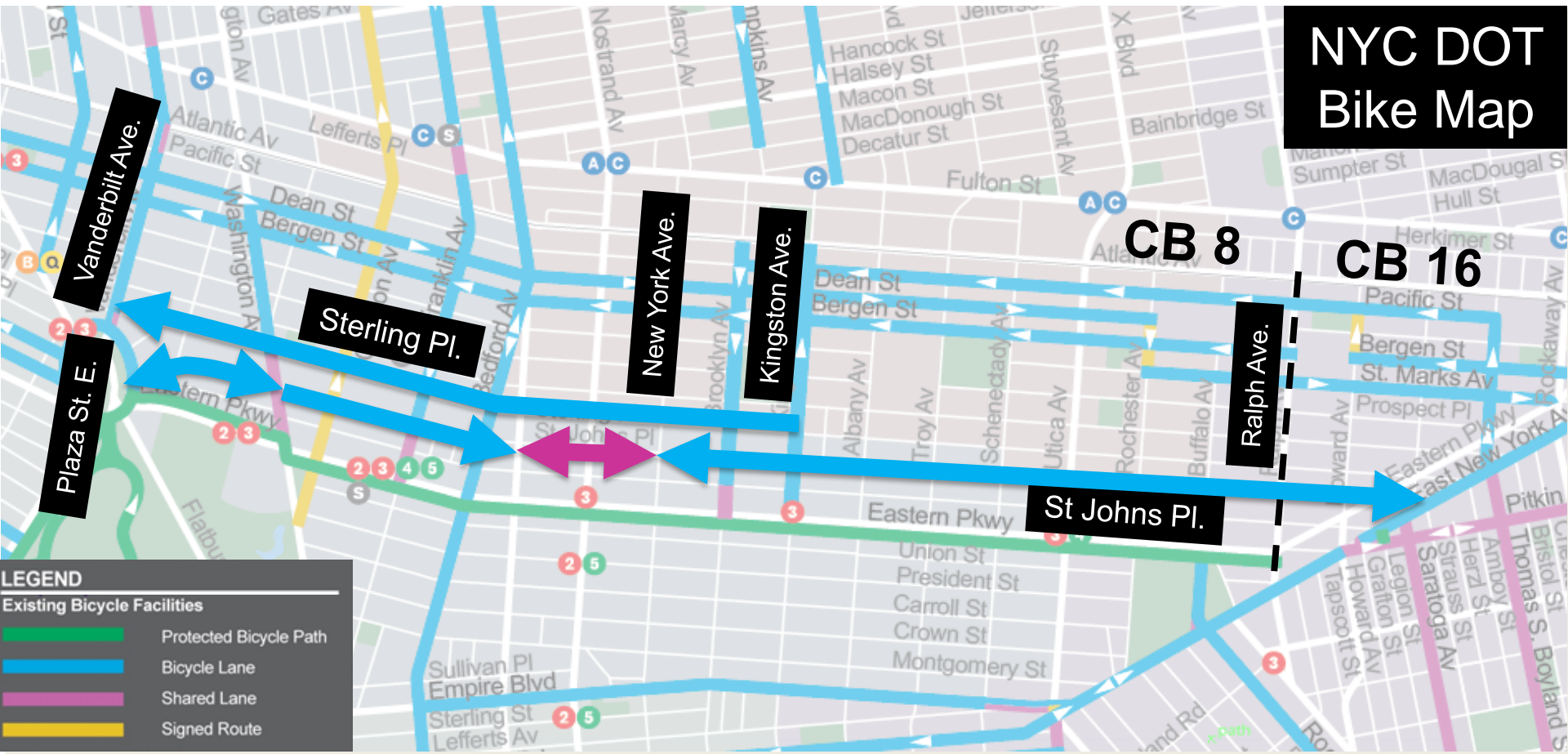


# Example: Ocean Avenue, BK



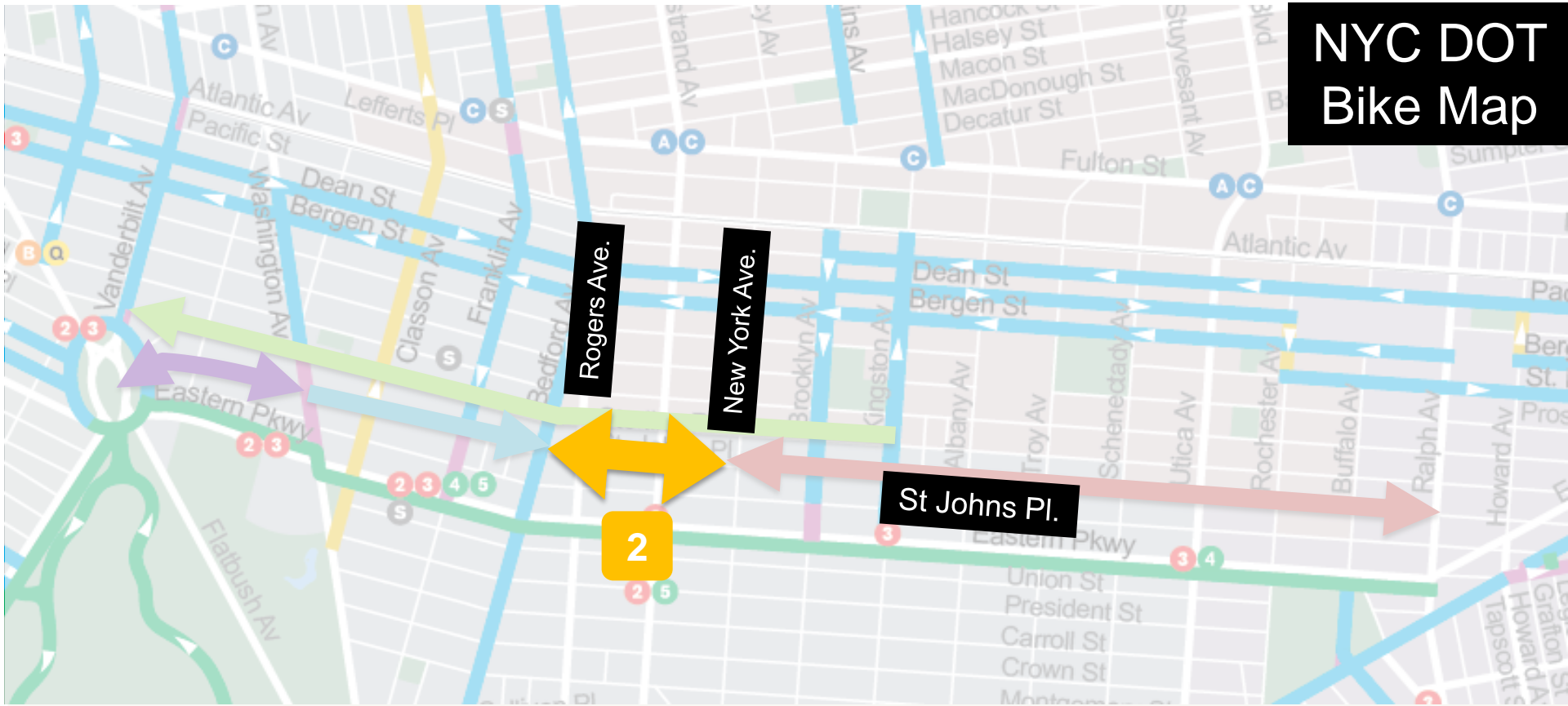


# Proposed: Bike Connections



# Project Location

NYC DOT  
Bike Map





# Existing Conditions: St. Johns Pl.

2 New York Ave. to Rogers Ave.



34 ft. wide street with one lane traveling in each direction

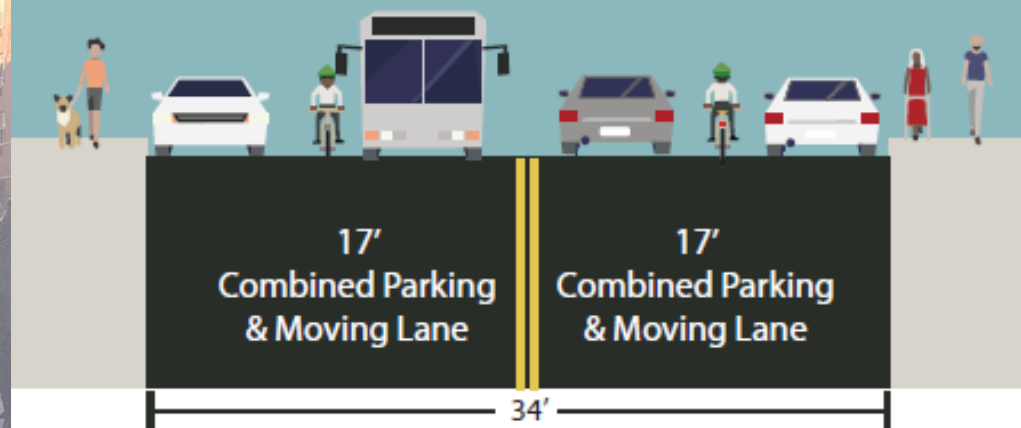


# Proposed: St. Johns Pl.

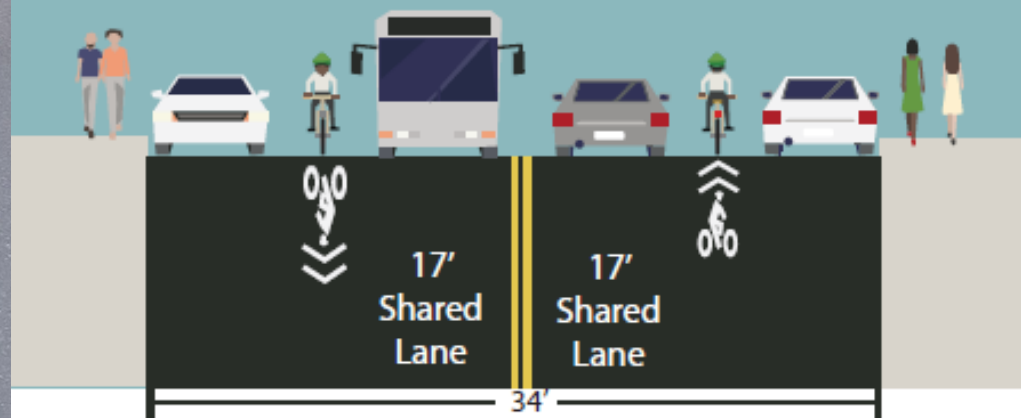
## 2 New York Ave. to Rogers Ave.

- Add shared lane markings in both directions
- Helps guide cyclists and alerts motorists

### Existing



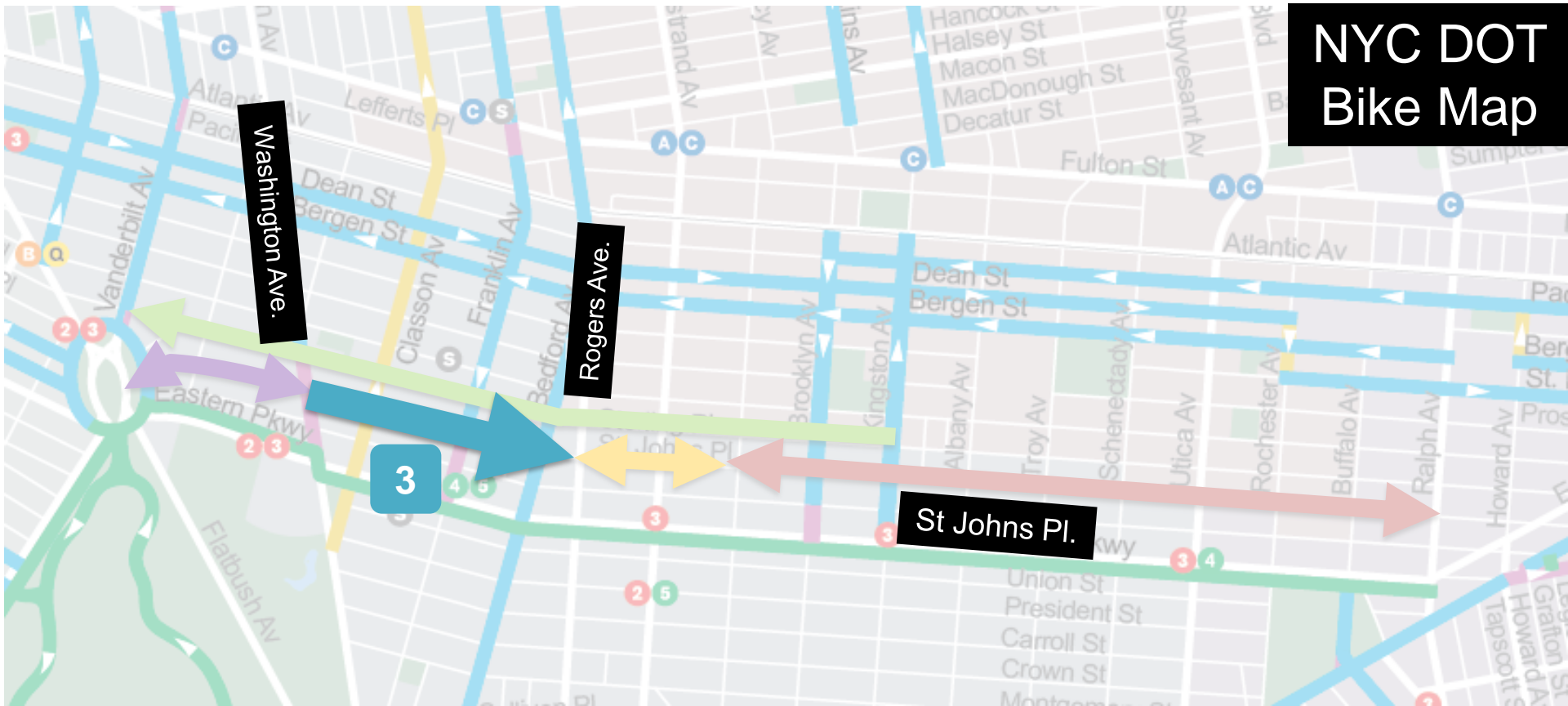
### Proposed





# Project Location

NYC DOT  
Bike Map



# Existing Conditions: St. Johns Pl.

## 3 Rogers Ave. to Washington Ave.



Vehicles use as one lane

- 34' wide with 2 lanes traveling eastbound
- Low volume: 175-225 vph at peak



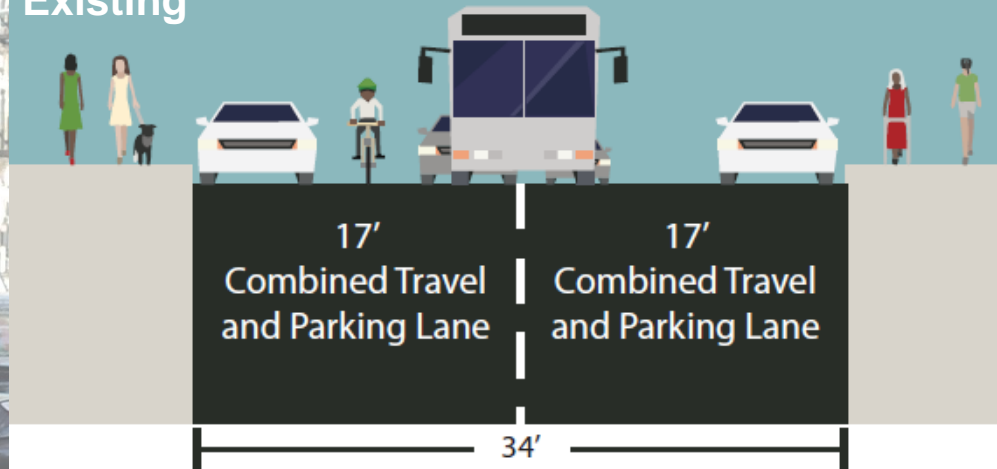


# Proposed: St. Johns Pl.

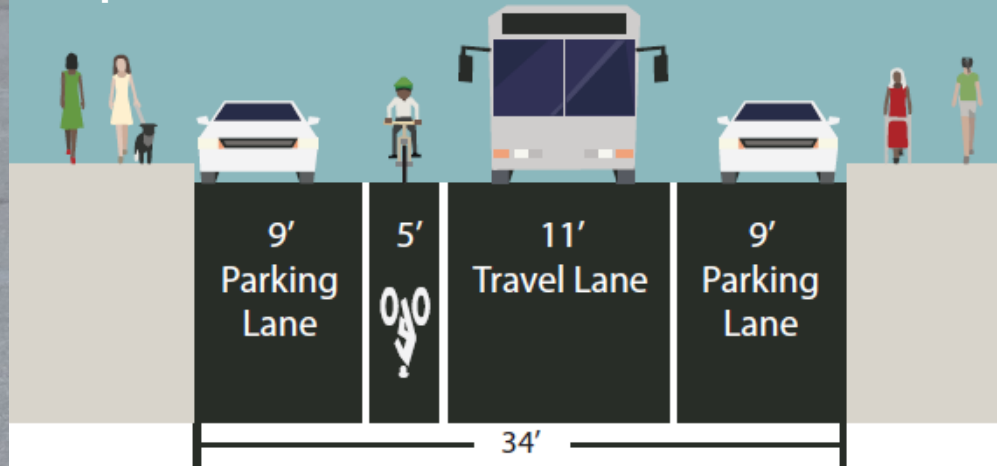
## 3 Rogers Ave. to Washington Ave.

- Upgrade travel lane and parking lane width
- Mark eastbound bike lane
  - Connects to existing routes Classon Ave., Franklin Ave., and Bedford Ave.
- Increases predictability for motorists/cyclists

Existing

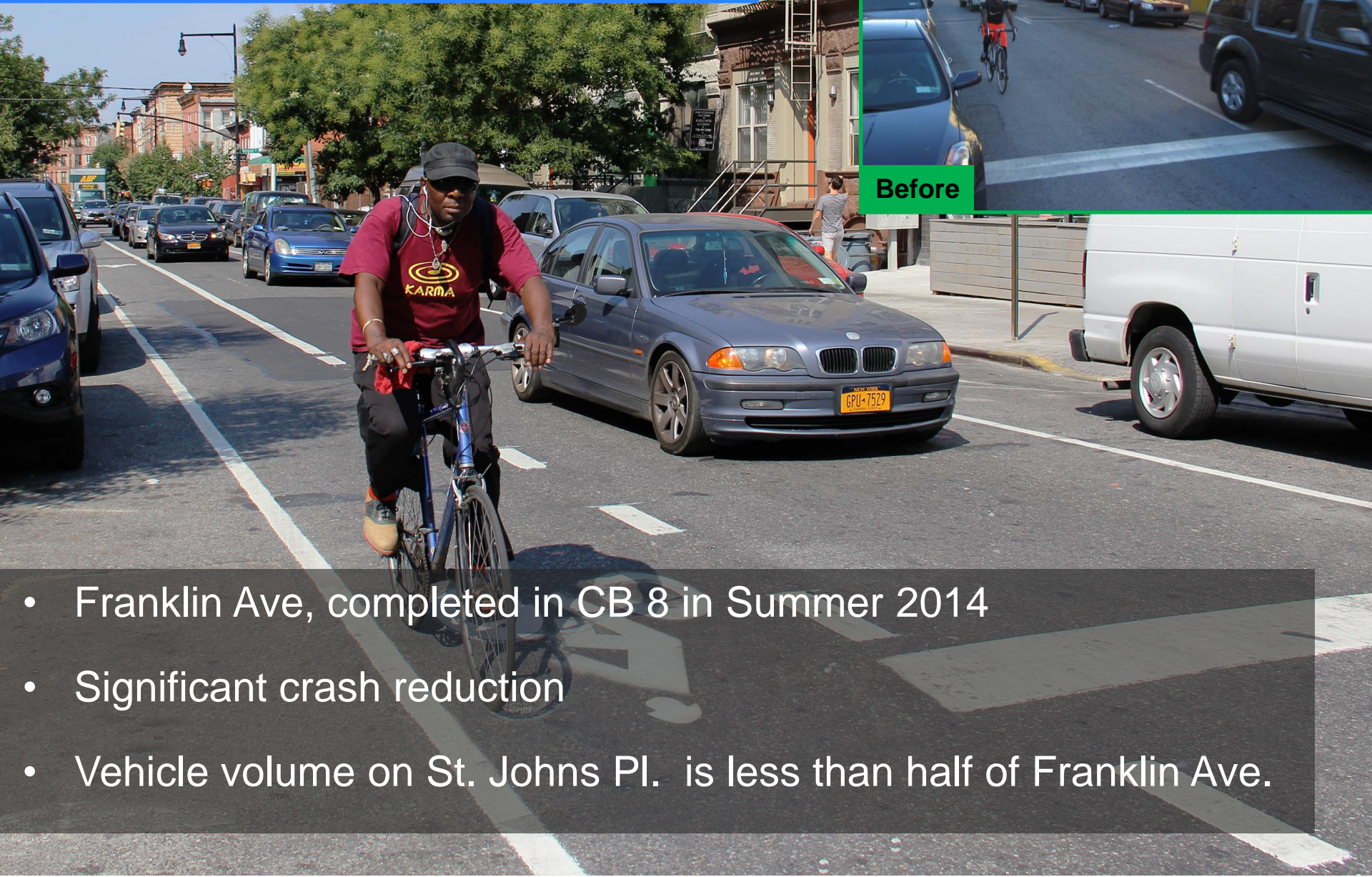


Proposed





# Example: Franklin Ave, BK



- Franklin Ave, completed in CB 8 in Summer 2014
- Significant crash reduction
- Vehicle volume on St. Johns Pl. is less than half of Franklin Ave.



# Project Location

NYC DOT  
Bike Map





# Existing Conditions: St. Johns Pl.

## 4 Washington Ave. to Plaza St E.



- 50 ft. wide roadway, one lane in each direction
- Existing 6 ft. flush median, wide parking lanes

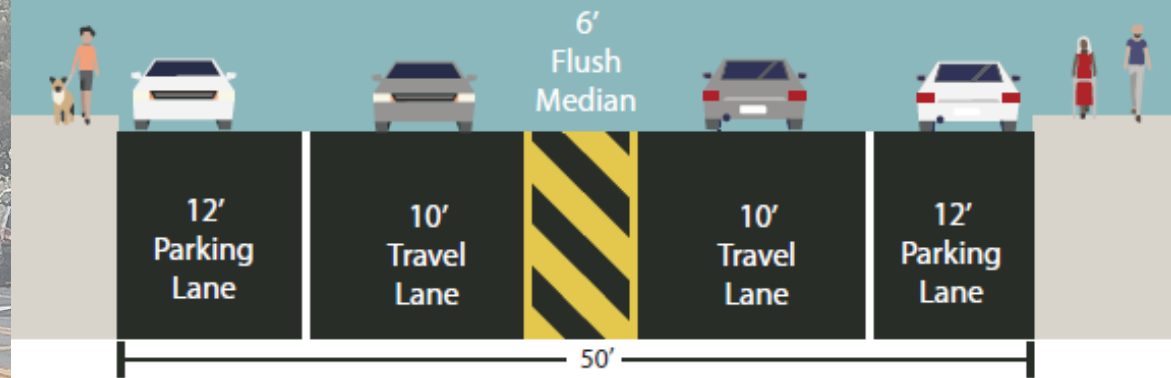


# Proposed: St. Johns Pl.

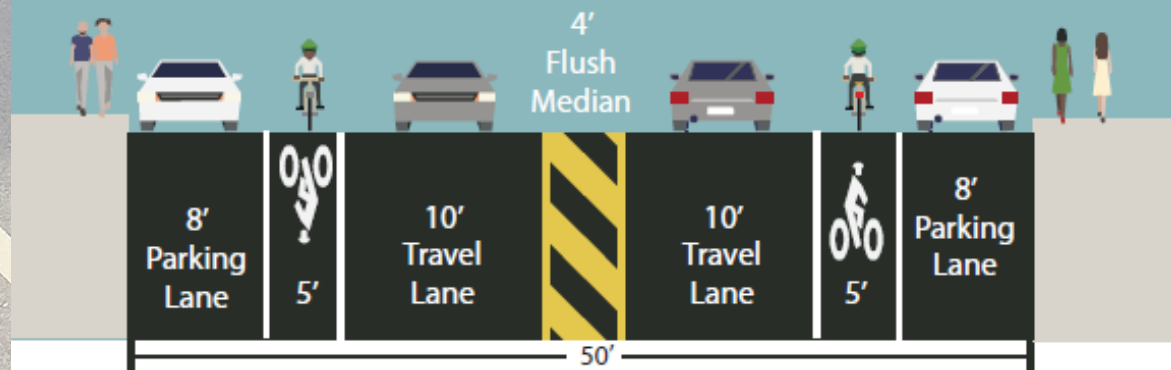
## 4 Washington Ave. to Plaza St. E.

- Narrow existing painted center median to 4 ft.
- Mark 2-way bicycle lane in eastbound and westbound direction
  - Connects to existing routes on Plaza St. E. and Washington Ave.

Existing



Proposed



# Project Location

NYC DOT  
Bike Map





# Existing Conditions: Sterling Pl.

5 Kingston Ave. to Vanderbilt Ave.



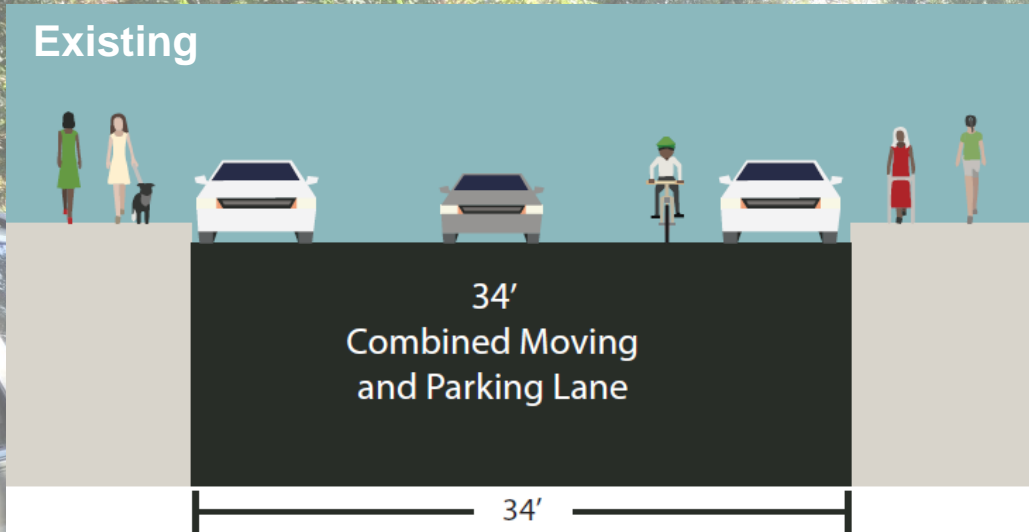
34 ft. wide street with one lane traveling westbound



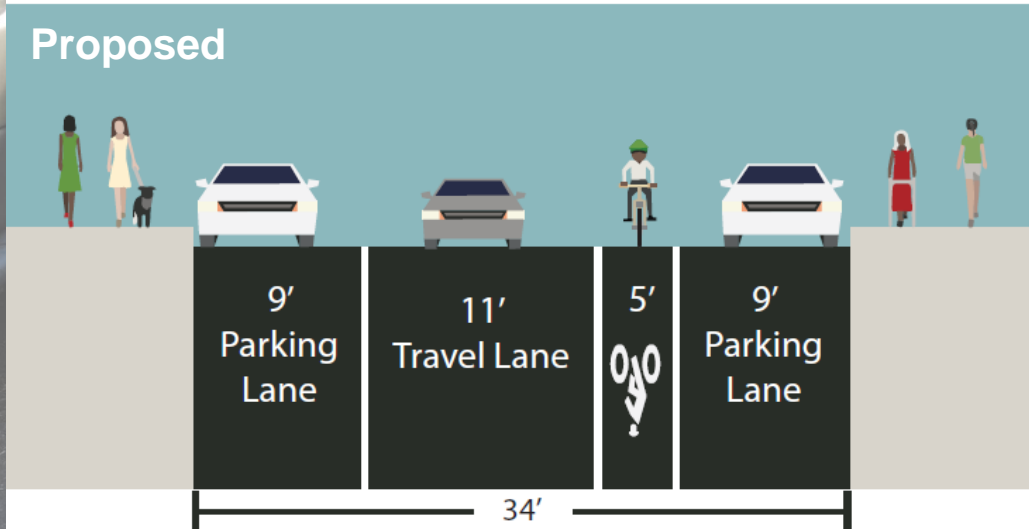
# Proposed: Sterling Pl.

5 Kingston Ave. to Vanderbilt Ave.

## Existing



## Proposed



Wayfinding signs direct cyclist to westbound route



B45 turns onto Sterling Pl. at Rogers Ave



# Project Benefits

- Reduces speeding by creating standard width moving lanes
- Simplifies high crash intersections for pedestrians and motor vehicles and allows simpler, safer left turns
- Maintains vehicle capacity and parking
- Creates new bicycle connections, increasing connectivity with existing routes



**Existing: St. Johns Pl.**



**Proposed Condition: Ocean Ave, Brooklyn**





Questions?

Thank  
You

Contact: DOT Brooklyn Borough Office at (646) 892-1350