

# Plaza Street Bicycle Connections Community Boards 6 & 8



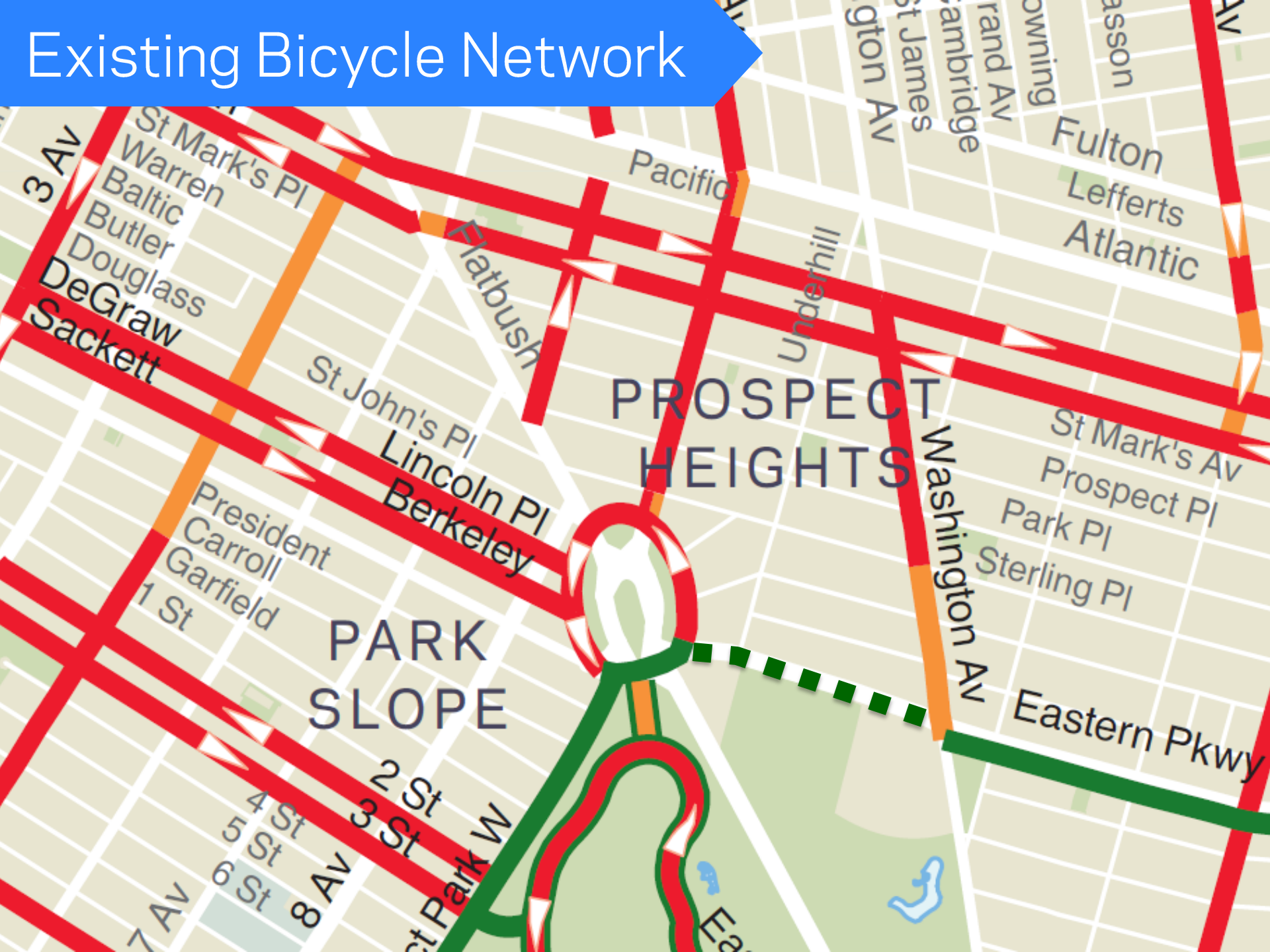


# Timeline

The background image shows a city street scene. In the foreground, a person is riding a bicycle on a green-painted bike lane. The person is wearing a white t-shirt and dark pants. The bike has a blue frame and black tires. The street is paved with asphalt and has a yellow curb. In the background, there are several multi-story buildings with windows and balconies. The sky is clear and blue.

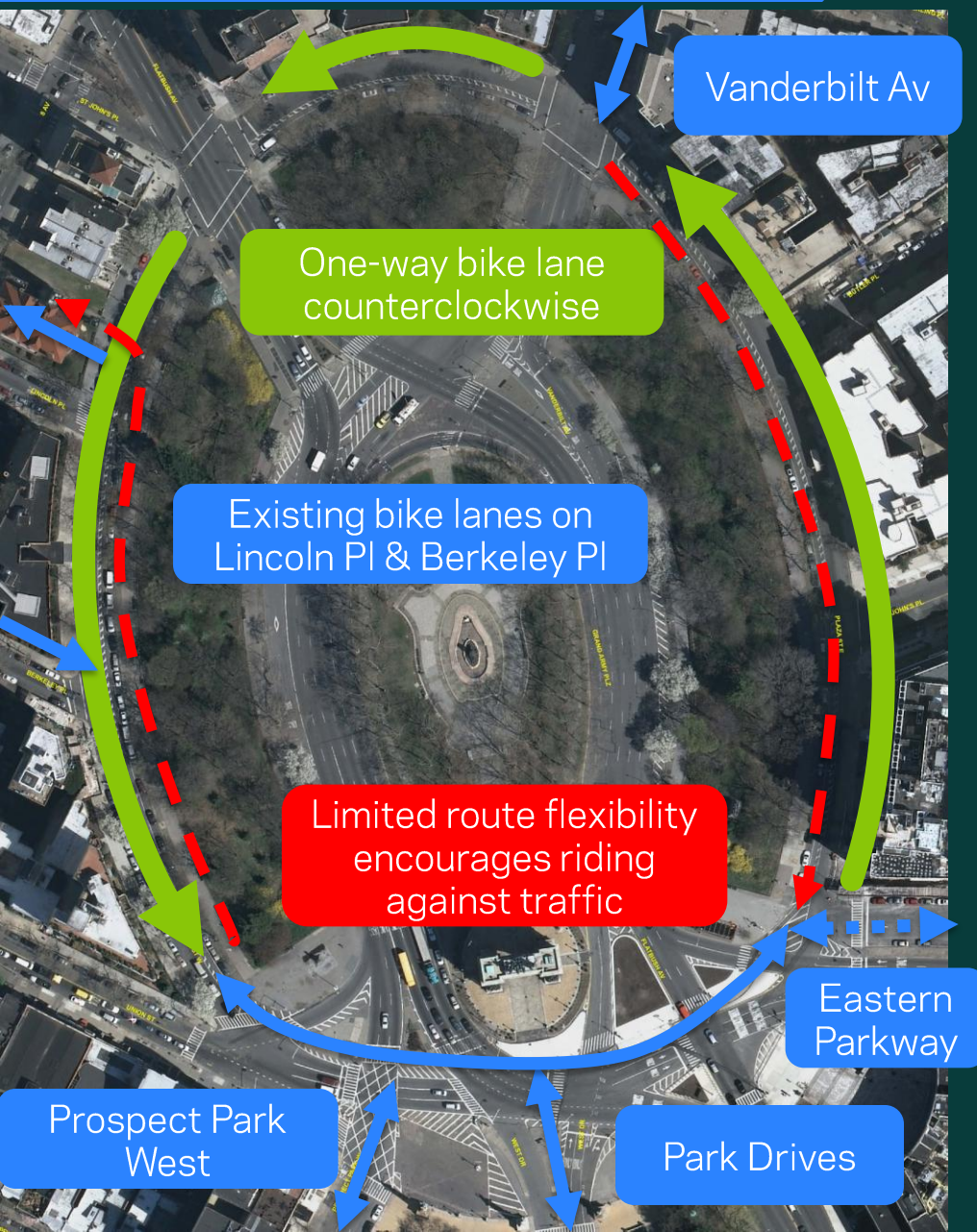
- **2004:** Plaza Street Buffered Bike Lane Installed
- **2007- 2013:** Bike Network Enhancements: GAP Southeast, Vanderbilt, Berkeley/Lincoln, PPW, Eastern Parkway (under construction)
- **2010:** DOT Proposes converting bike lane to two-way as part of GAP project
- **2011:** GapCo & other community members express concerns with 2010 Design Proposal
- **2012:** DOT proposes new design option

# Existing Bicycle Network

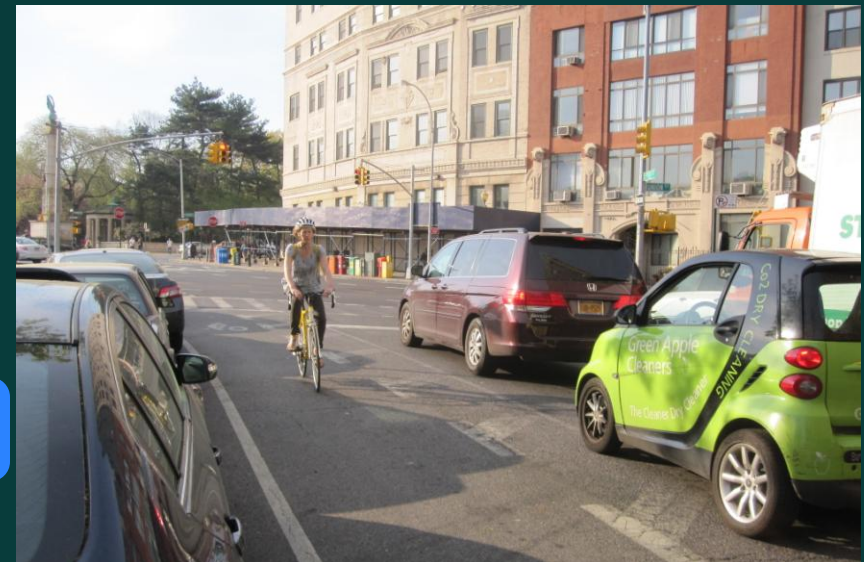




# Existing Conditions



- 27% of AM commuter bicycle traffic is contraflow



Weekday count taken 11/9/11 between Berkeley & Union 7:00am to 9:00am



# Existing Conditions – Contraflow Cyclists



Contraflow Cyclists



# Existing Conditions



## Plaza Street Bike Trip Length

		# Blocks	
From	To	Existing	Proposed
Vanderbilt	EP	5+	3
PPW	Lincoln	6+	2
Berkeley	Vanderbilt	5+	3
EP	Lincoln	5	3+

- Existing traffic direction forces long trips crossing busy streets
- Two-way facility will shorten connector trips to 2 or 3 blocks
- Short trips require attention to ons and offs

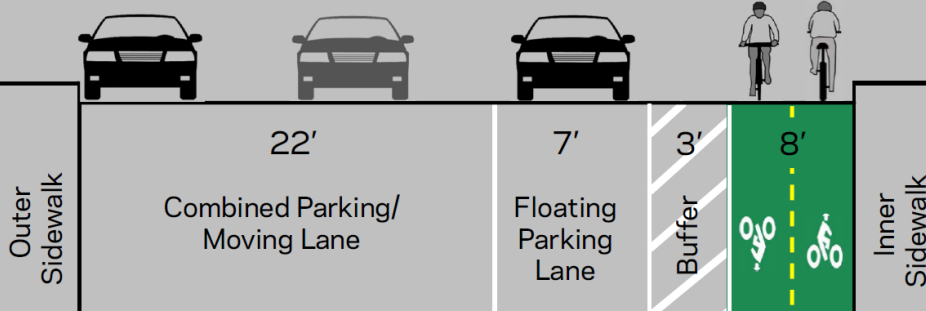
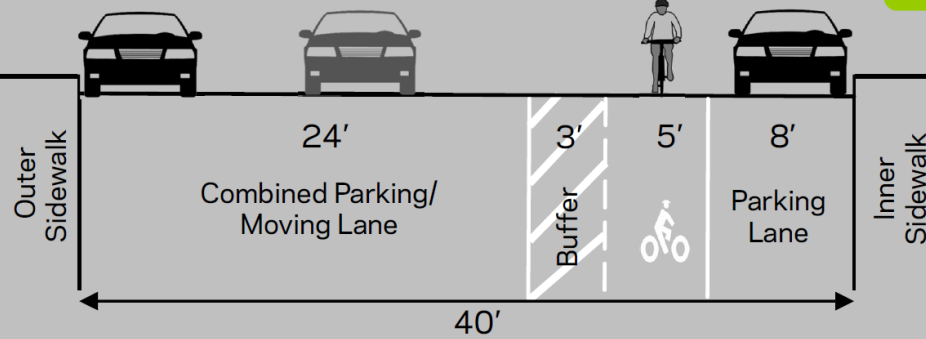
# 2010 Design Proposal



Kent Avenue

Existing

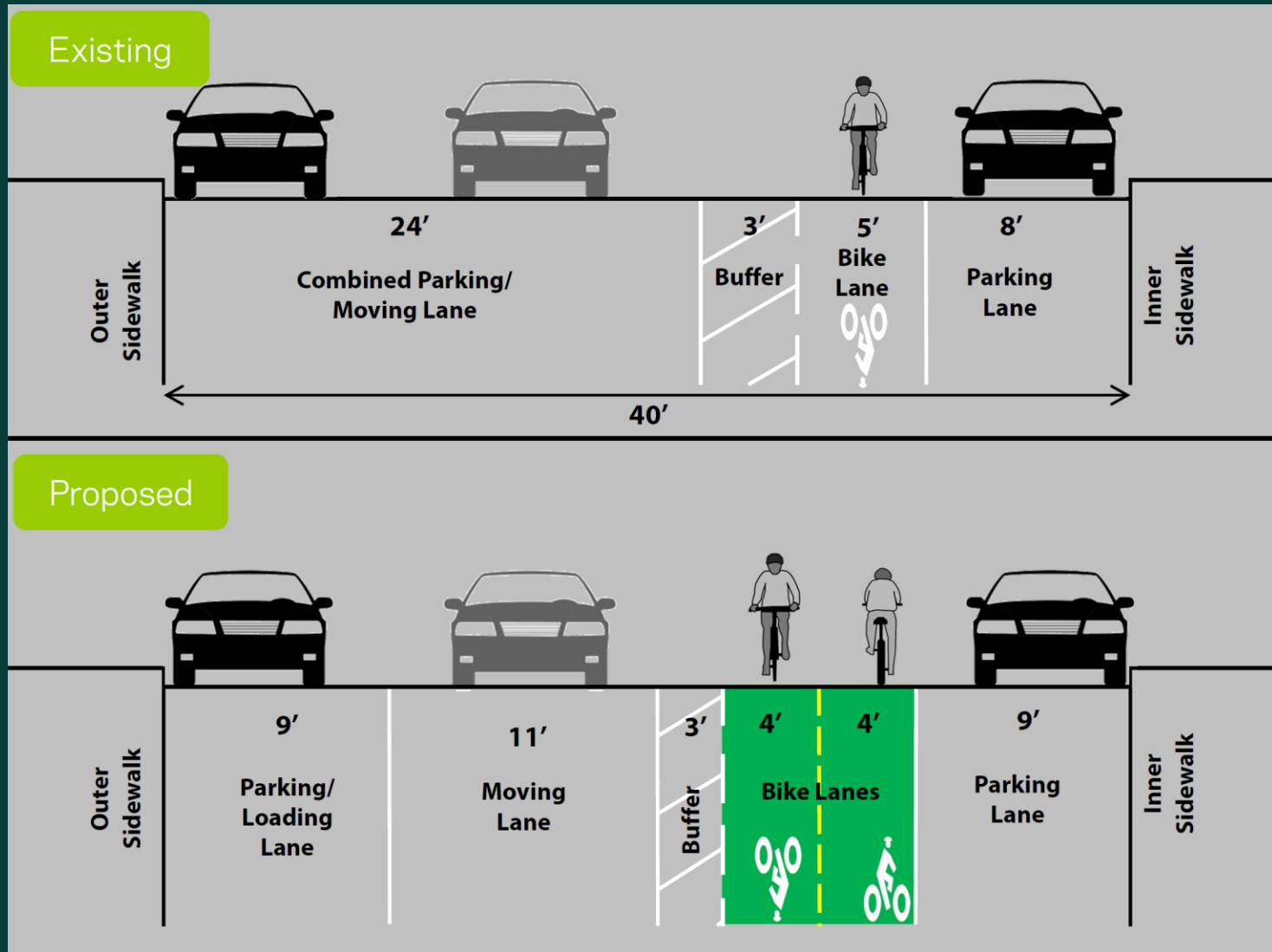
Proposed



## Community Concerns:

- Reduced effective roadway & potential impact on through traffic
- Reduction of parking for bike path access and turn lanes: Approx. 30 spaces

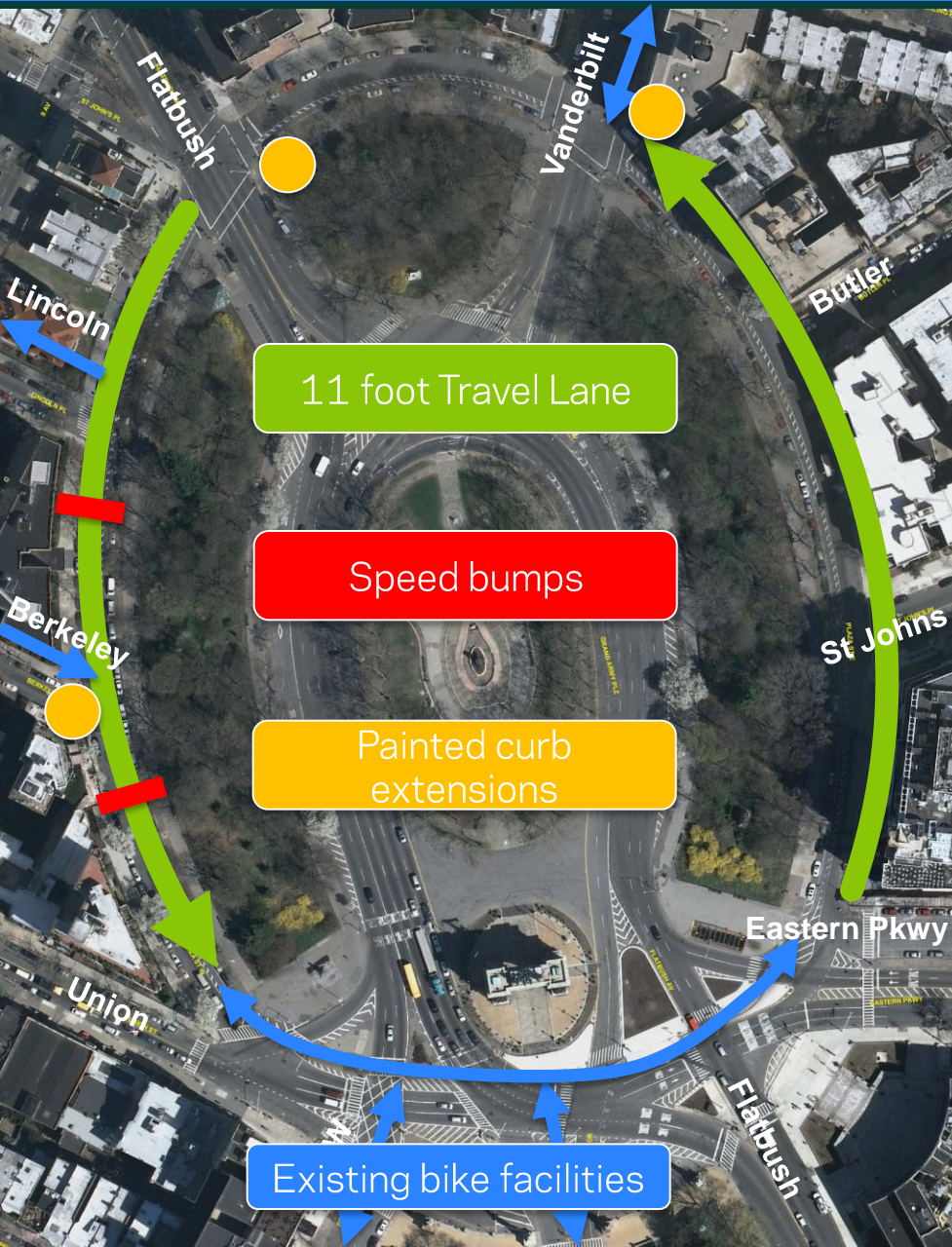
# 2012 Design Proposal



Typical cross-section, actual street width varies 40 to 44 feet



# Proposed Improvements – Traffic Calming



- 11-Foot wide travel lane
  - Discourages speeding
- Speed Bumps
  - Control illegal speeding
  - Discourage cut-throughs
- Painted Sidewalk Extensions
  - Emphasize right of way of crossing pedestrians
  - Proposed locations:
    - SWC at Berkeley Place
    - SEC of Flatbush Ave
    - NEC of Vanderbilt Ave

# Proposed Improvements – Traffic Calming



Speed Bump Through Bike Lane



Painted Sidewalk Extension



# Comparing Designs

**1.Sense of Protection**

**2.Bike Network Access**

**3.Limited Impact on Other Street Users**

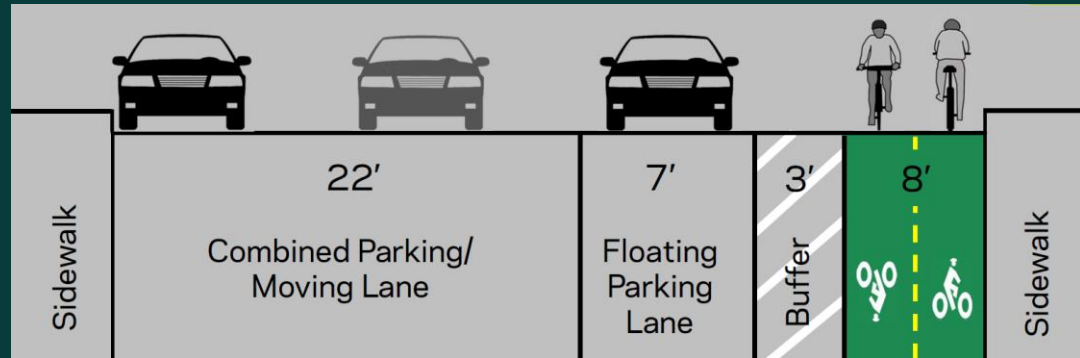
**4.Limited Parking Loss**

# Comparison: Sense of Protection

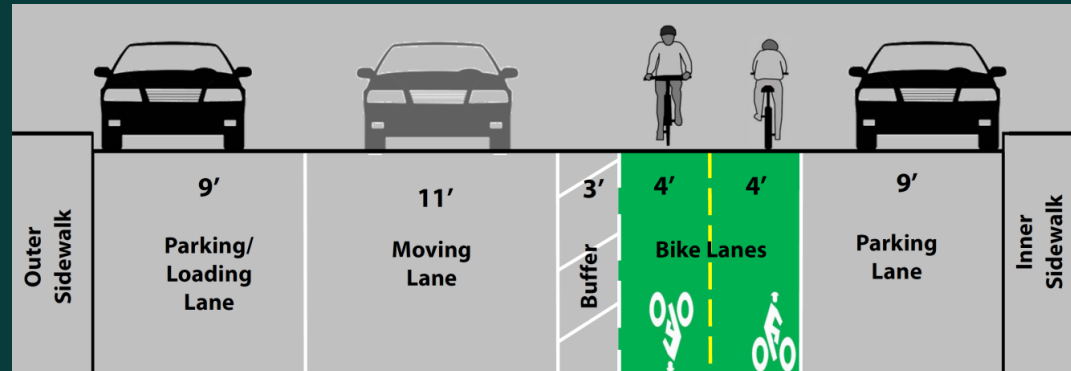
Sense of Protection



## 2010 Protected Bike Path



## 2012 Two-way Bike Lane



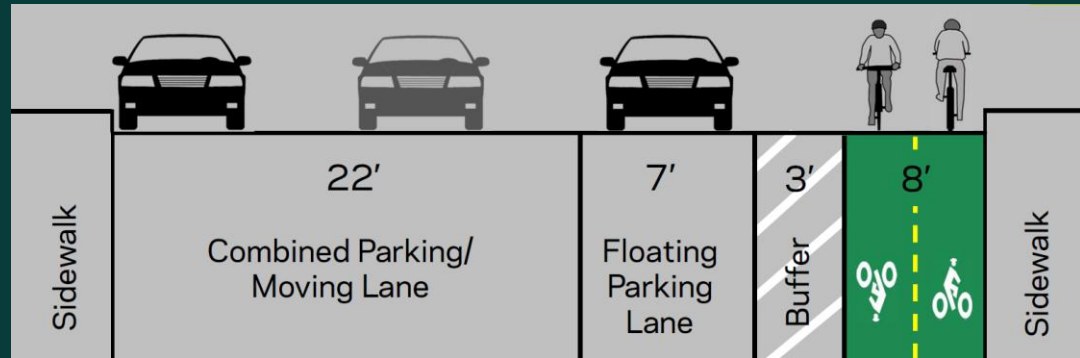
Less demand for protection due to low traffic volumes



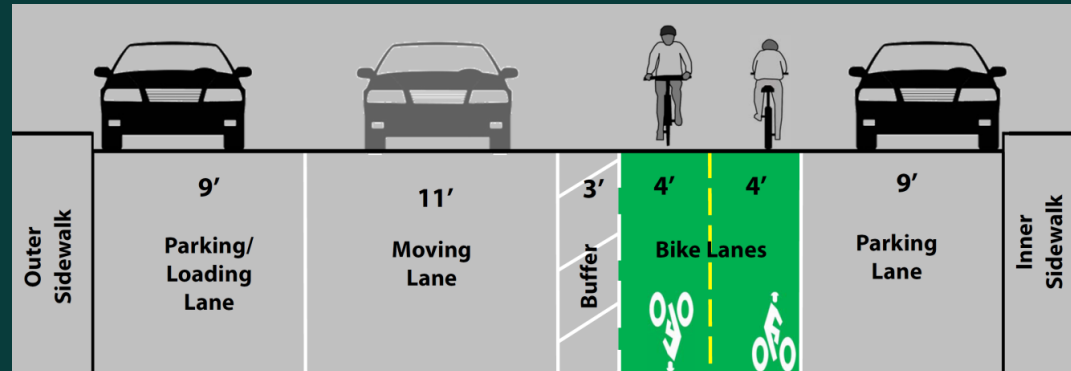
# Comparison: Bike Network Access

Bike Network  
Access

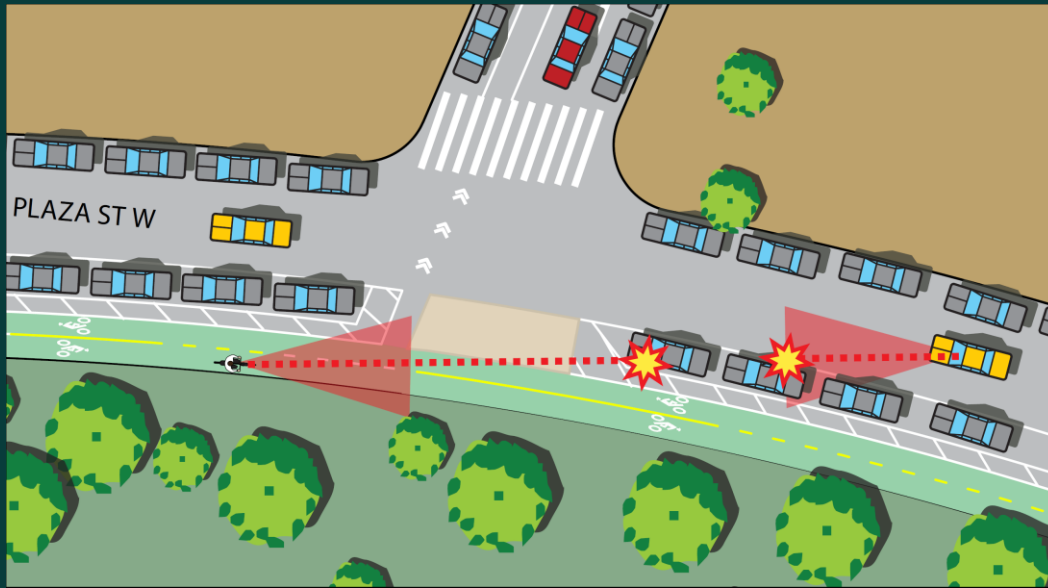
## 2010 Protected Bike Path



## 2012 Two-way Bike Lane

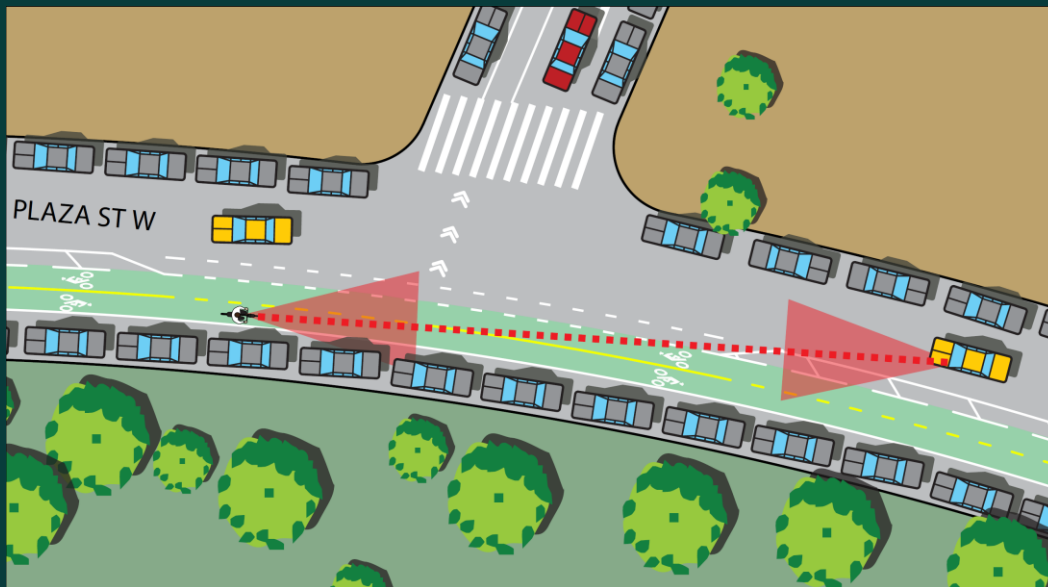


# Comparison: Bike Network Access



## 2010 Protected Bike Path

- Safety: poor visibility
- Mobility: two-stage turn required



## 2012 Two-way Bike Lane

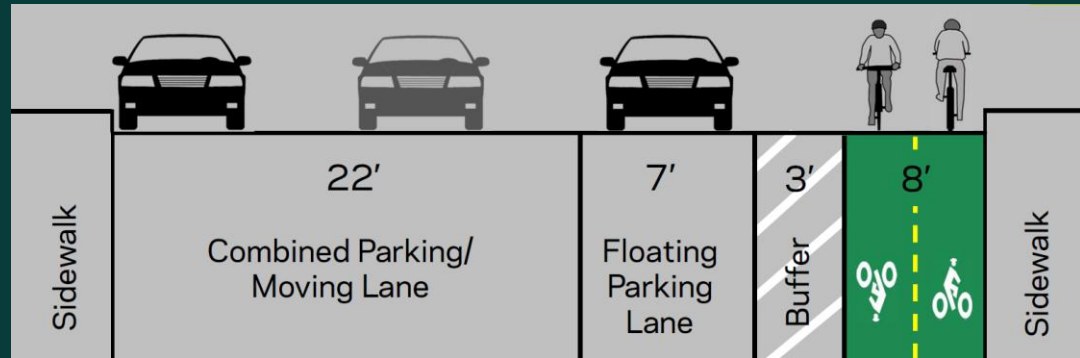
- Safety: excellent sight lines for turns
- Mobility: simpler/quicker turns, cyclist can pick out gaps in traffic



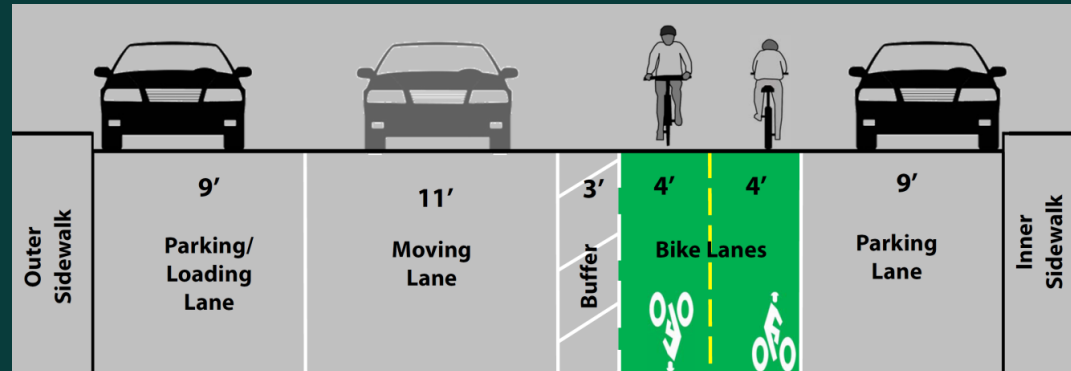
# Comparison: Impact on Other Street Users

Limited Impact on Other  
Street Users

## 2010 Protected Bike Path



## 2012 Two-way Bike Lane



# Comparison: Impact on Other Street Users

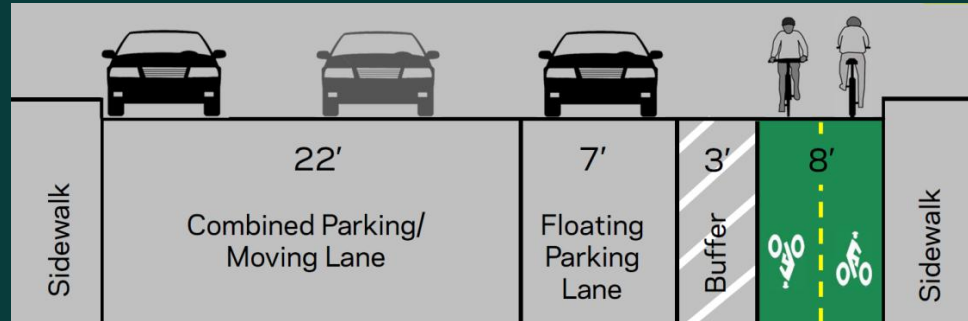




# Comparison: Limiting Parking Loss

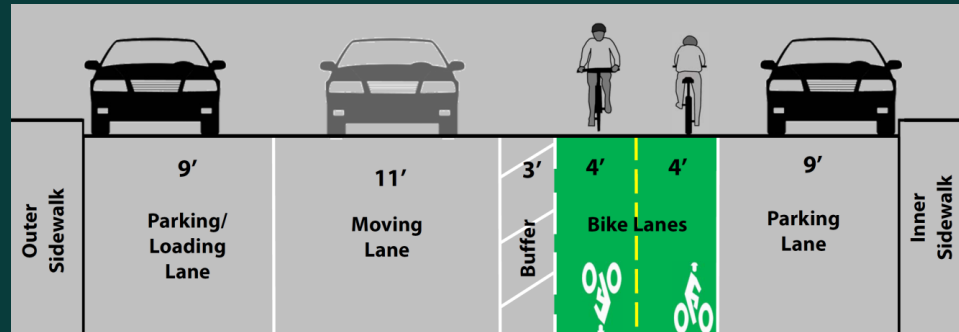
## Limiting Parking Loss

### 2010 Protected Bike Path



Removed 30 of 92 spaces along berm

### 2012 Two-way Bike Lane



No spaces removed



# Comparison of 2010 & 2012 Proposals

Sense of Protection



Bike Network Access



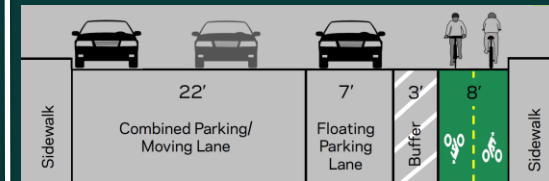
Limiting Impact on Other Street Users



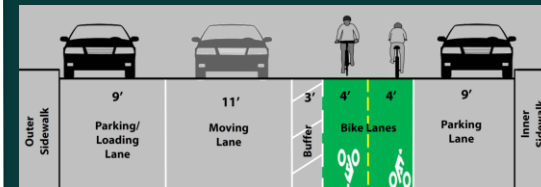
Limiting Parking Loss



**2010** Protected Bike Path:



**2012** Two-way Bike Lane:





# Inspiration for Innovative Design

Chicago



D.C.



Brooklyn



- Contra-flow treatment already successful in major U.S. cities
- Ocean Parkway Service Road two-way lane installed 2009

# Proposal Summary

## Proposal:

- Addresses 2010 community concerns
- Two-way buffered bicycle lane
- Narrow existing moving lane to standard width
- Wide separation between vehicles and contra-flow bikes
- Speed bumps & painted neckdowns

## Benefits:

- Improved cycling route flexibility & connectivity
- Easy on/off for short bike trips
- Traffic calming on residential street – safer for all users
- Predictability of two-way cyclists – safer ped crossing
- No parking loss



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

Thank  
You

