



# DYCKMAN ST

## Safety Improvements

Presented to Manhattan CB 12 Transportation Committee  
June 5, 2017

# PROJECT BACKGROUND

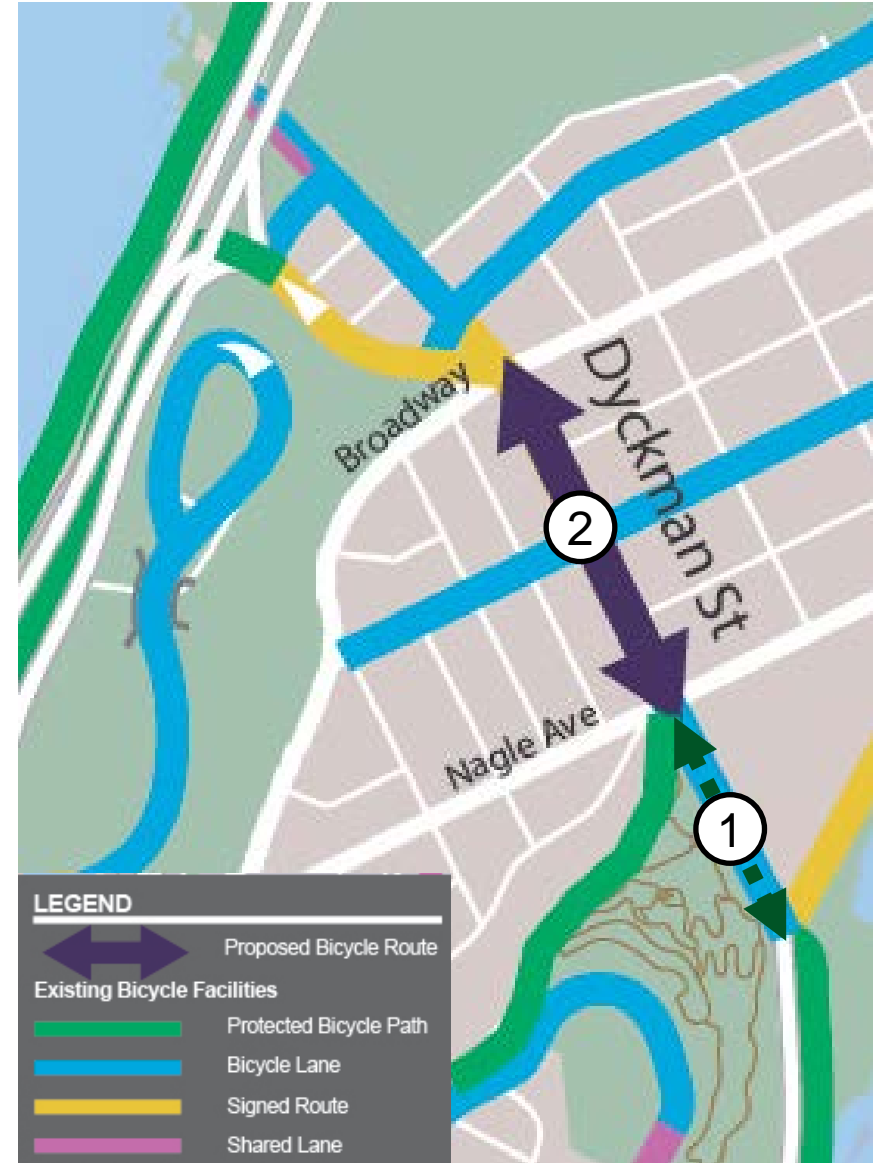
**Bike lane and pedestrian safety project (Broadway to 10<sup>th</sup> Ave)**  
**presented to CB 12 Transportation Committee December 2016**

- ① Approved protected bike lanes and pedestrian improvements - Nagle Ave to 10<sup>th</sup> Ave
- ② Requested workshop to discuss bike lane design options - Broadway to Nagle Ave

**Community workshop held April 2017**

**Design revised based on community input**

**Roadway marking refurbishment (Broadway to Nagle Ave) and safety upgrades (Nagle Ave to 10<sup>th</sup> Ave) scheduled for 2017**





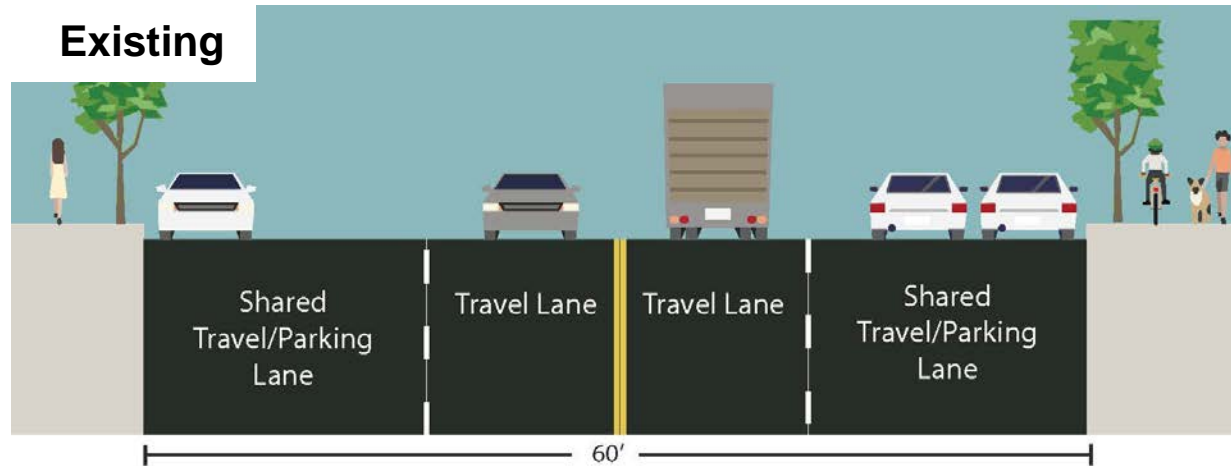
# WORKSHOP OUTCOMES

- Strong preference for **protected bike lanes** that are less likely to be blocked by double parked cars
- Concern about motorists **not being able to pass double parked cars** if lanes are removed
- Desire for **safer pedestrian crossings**, particularly on side streets where turning vehicles feel back pressure
- Concern about **congestion at Nagle Ave**

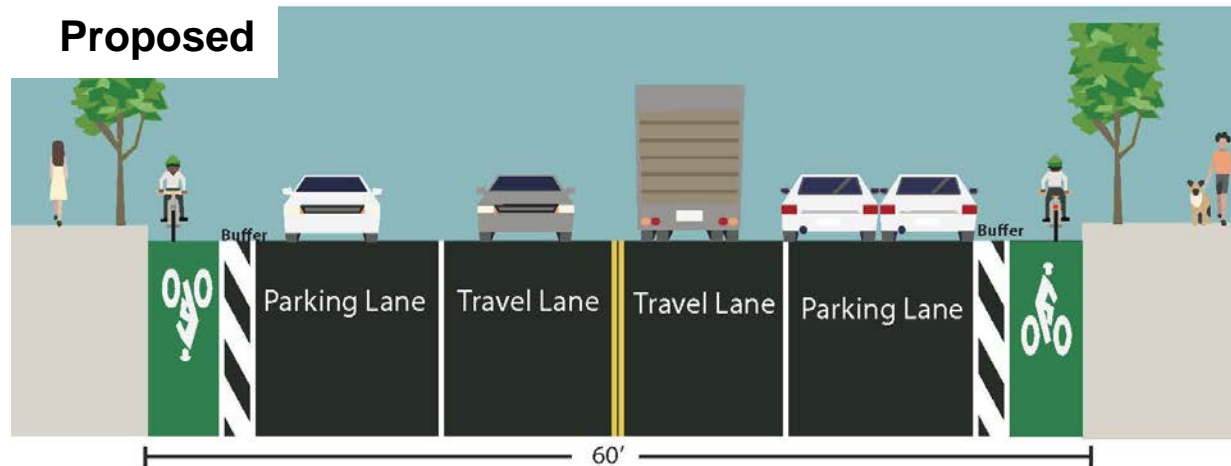


# REVISED PROPOSAL – Typical Corridor Design

Existing



Proposed



- **Parking protected bike lanes** provide dedicated space for bikes away from moving vehicles, less likely to be blocked by parked cars
- **Wide parking lanes** keep moving lanes from being blocked by double parked cars
- **Travel lane removal** consistent with low vehicle volumes and traffic analysis

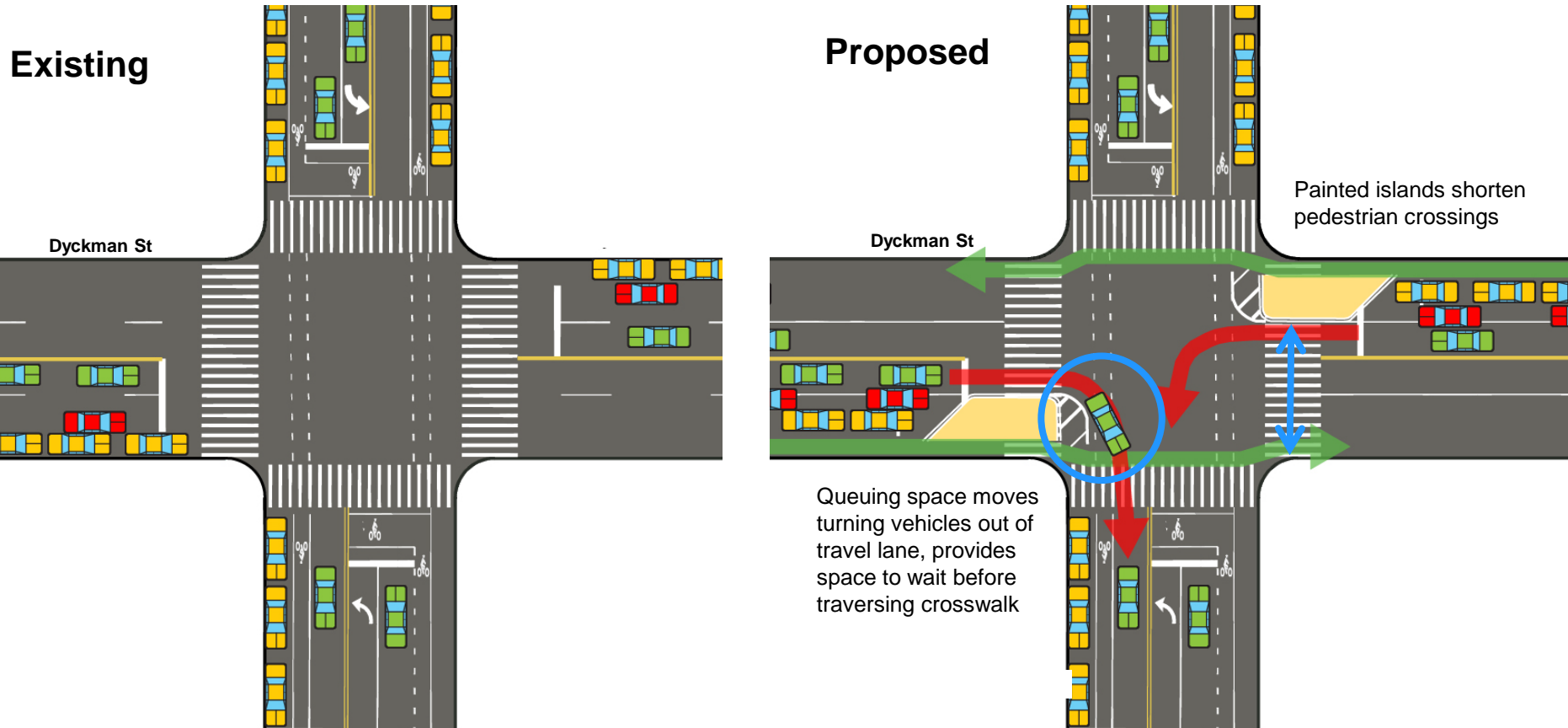
# REVISED PROPOSAL – Traffic Analysis

- **Goal: Improve safety for all road users while maintaining traffic flow**
- **Data collection**
  - Automated Traffic Recorders, including Summer Counts
  - Manual Turning Counts
  - Time Lapse Photography
- **Traffic Analysis**
  - Study existing conditions including vehicle volumes, geometry, signal timing, parking
  - Model existing and proposed conditions
  - Need to maintain two lanes at approaches to Broadway, Nagle Ave, 10<sup>th</sup> Ave to process turning vehicles at these intersections
    - Due to double parking, these intersections are not always operating with two lanes on the approach, contributing to congestion
  - Two lanes not needed at other intersections because fewer vehicles are turning



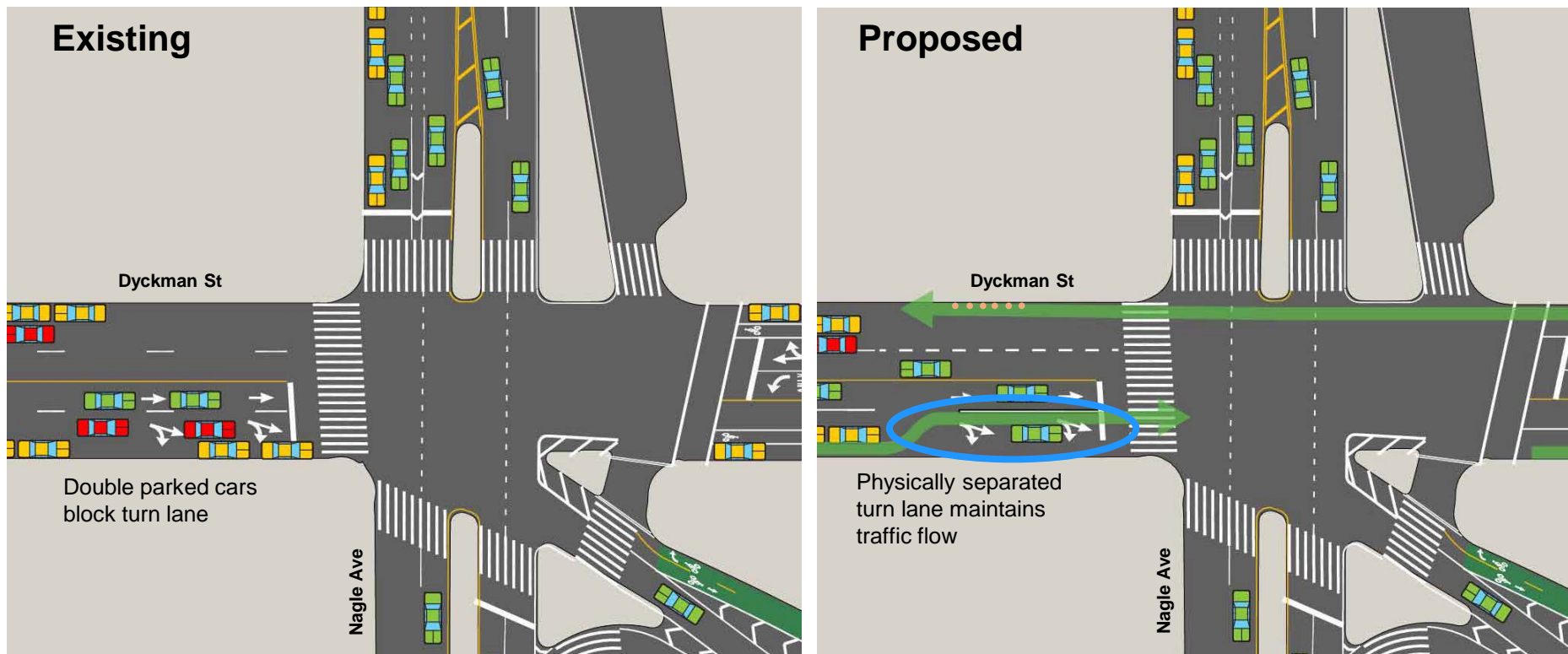


# REVISED PROPOSAL – Typical Intersection Design



- **Painted pedestrian islands** shorten crossing of Dyckman St, slow turning vehicles
- **Queuing space** for vehicles to wait after turning before traversing crosswalk, reducing back pressure and creating safer pedestrian crossings on side streets, improves vehicular flow
- **Leading Pedestrian Intervals** allow pedestrians to start crossing before vehicles
- **Daylighting** increases visibility, requires minimal parking loss (approximately 2 spaces between Broadway and Nagle Ave)

# REVISED PROPOSAL – Nagle Ave Intersection Design



- **Turn lanes** maintain vehicular capacity at major intersection, requires parking removal (approximately 7 spaces for EB turn lane, 4 spaces for WB turn lane)
- **Physical barrier** prevents double parking in turn that causes congestion, improves traffic flow by allowing intersection to process better
- **Updated curb regulations** increase parking turnover at peak periods to decrease double parking and reduce congestion (in development)
- **Leading Pedestrian Intervals** increase pedestrian safety

## SUMMARY

- Parking protected bike lanes separate bikes from moving vehicles and are not blocked by double parked vehicles
- Wide parking lanes keep travel lanes from being blocked by double parked vehicles
- Intersection improvements create shorter, safer pedestrian crossings and improve vehicular flow
- Turn lanes maintain capacity at Broadway and Nagle Ave
- Revised design from Nagle Ave to 10<sup>th</sup> Ave keeps protected bike lanes on either side of street, maintains new crosswalk and pedestrian island at 10<sup>th</sup> Ave

## NEXT STEPS

- Marking refurbishment scheduled for 2017, could include proposed safety improvements
- Monitoring and evaluation would follow implementation
- Continue to work with parking unit and community to update curb regulations





# Questions?

# THANK YOU!



NYC DOT



NYC DOT



nyc\_dot



NYC DOT