





## PRESENTATION OVERVIEW

- 1. Background & Project History
- 2. Proposal
- 3. Outreach & Design Progress
- 4. Phasing & Next Steps
- 5. Summary

Background & Project History

#### **NYC MOBILITY**

## **Recent Travel Trends (2010-2015)**

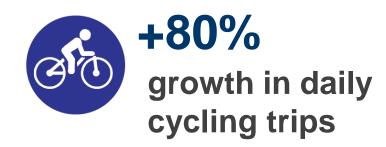




As the city grows, there is higher demand on the transportation system and people are increasingly turning to mass transit, FHV carpooling, and cycling.







## **VISION ZERO – GREAT STREETS**



New York City's plan for ending traffic deaths and injuries on our streets. Vision Zero was introduced on January 15th, 2014.

4<sup>th</sup> Avenue is a **Vision Zero Priority Corridor** and one of the program's four *Vision Zero Great Streets* projects.



# CHANGING LANDSCAPE OF CYCLING IN NYC

#### 2017: Safer Cycling report

- Vast majority of cyclist fatalities occur on streets without bicycle facilities
- Most crashes involving cyclists occur at intersections

#### **2014**: Protected Bike Lane Study

Safety gains for all road users

- All injuries down 20%
- Pedestrian injuries down 22%
- Motor vehicle occupant injuries down 25%

#### 2010-2015: New Yorkers riding bikes

- Daily cycling up 80%
- Brooklyn bike commutes to work up 83%
- Daily cycling trips up to 450,000

#### **2016**: Bike Share expansion

- Brooklyn CB 6 installed fall 2016
- Potential future expansion to Sunset Park

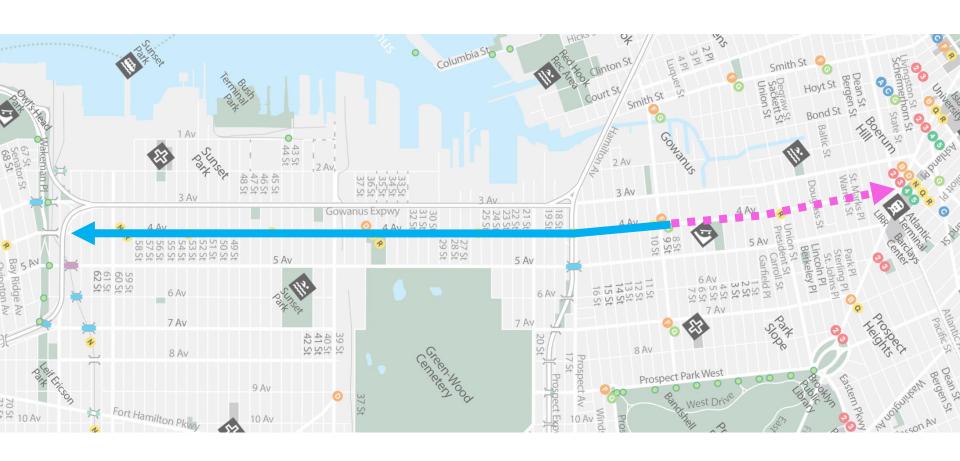




# **Project Location**

**Ongoing** Capital Project Limits: 8 St – 65 St

Future Capital Project Limits: Atlantic Ave - 8 St



## 4th Avenue Capital Project (previous design)



# Original Capital Project Scope of Work

- Raised medians
- Landscaping: planted median
- Public art
- Benches
- Wayfinding signage

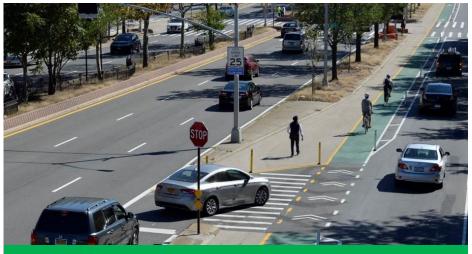




Proposal did not include bicycle facilities, based on 2011 conditions



Elected Officials and Community have asked DOT to consider additional complete streets elements in light of changing context and availability of new designs



**Queens Boulevard** 

Queens, 2015



**Amsterdam Avenue** 

Manhattan, 2015



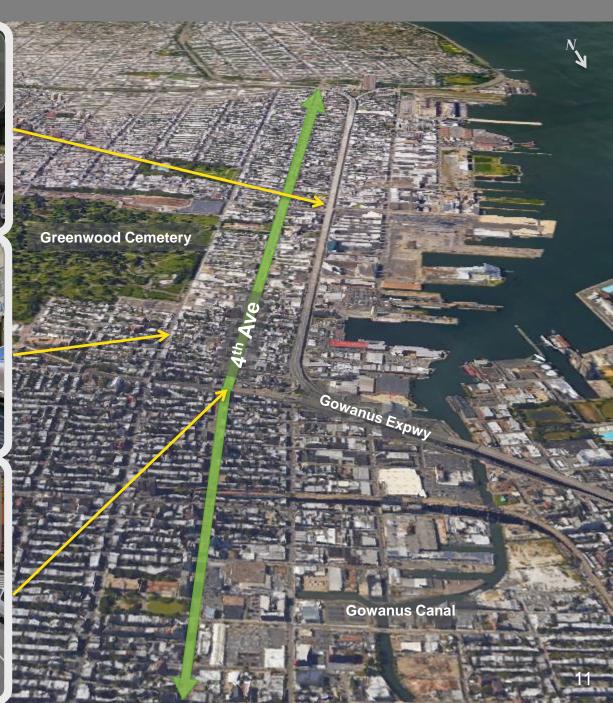
**Jay Street** 

Brooklyn, 2016









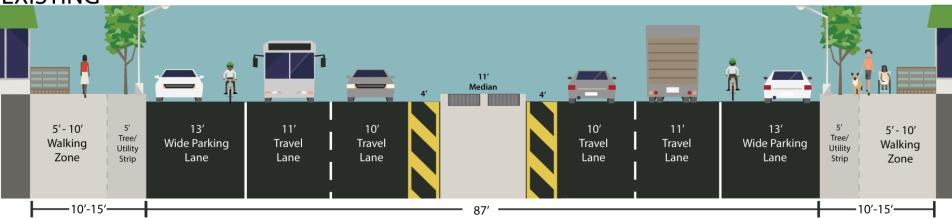
# **Proposal**

Complete Street Design

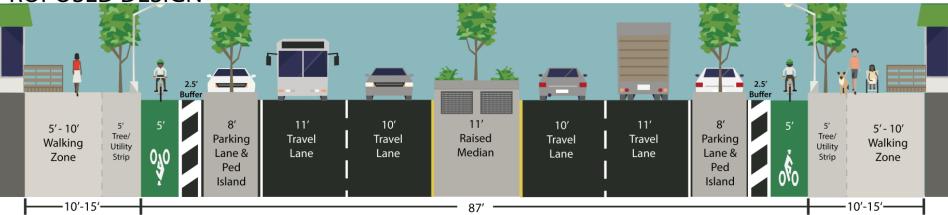


## **CROSS SECTION - TYPICAL**

## **EXISTING**



## PROPOSED DESIGN



# **COMPLETE STREET DESIGN:** *Overview*

## **Safety**

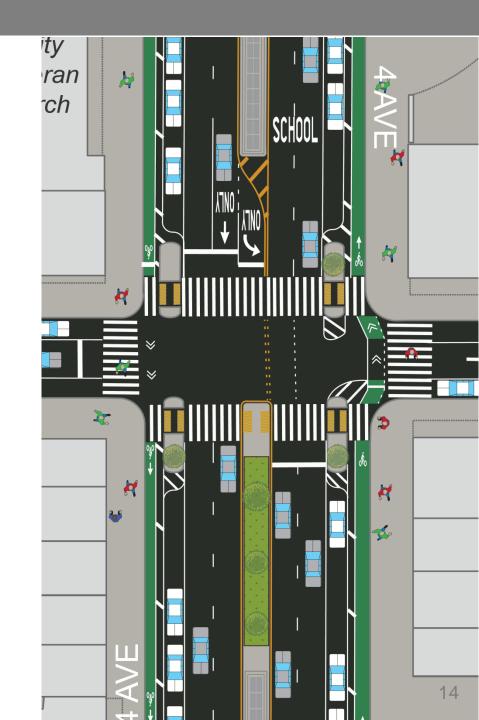
- Protected bike lanes
- Pedestrian refuge islands
- Maintain left-turn bans, high-visibility crosswalks, & road diet

## **Traffic Operations**

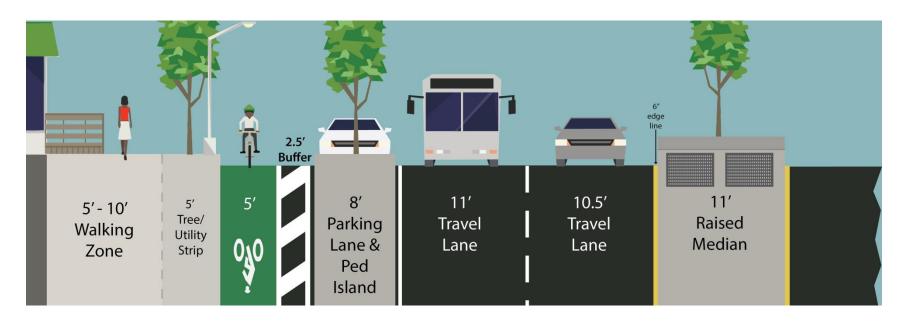
- Maintain existing number of lanes and rush-hour lane (38th St to Prospect Av)
- Identify loading zones and expand metered parking

## **Streetscape**

- Add plantings & trees
- Install wayfinding signs
- Add street seating
- Add public art



### **COMPLETE STREET DESIGN – BENEFITS**



#### **Pedestrians**

#### **ADD**

pedestrian refuge islands, median refuges where feasible

#### **ADD**

Neckdowns at key pedestrian locations

### **Bicycling**

#### **ADD**

protected bicycle lane and protected intersection design

#### **Parking**

#### **ADD**

loading zones

## **EXPAND**

metering

#### **REMOVE**

parking for ped islands (4/blk)

## Traffic/Loading

## MAINTAIN

all travel & turn lanes

#### **CHANGE**

wide parking lane to 8' parking lane

#### **Streetscape**

#### **ADD**

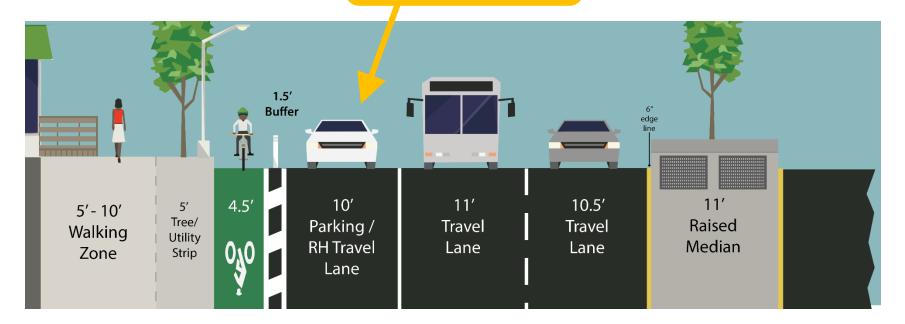
trees and shrubs in median and refuge islands

#### **ADD**

benches, wayfinding, public art

### **AM Rush Hour Section**

Rush Hour Lane: 38 St to Prospect Expy, 7AM-10AM, Mon-Fri







Parking-protected bicycle lane

AM rush-hour curbside bicycle lane / Parking-protected bicycle lane No bicycle facility (3 NB travel lanes)

Protected bike facilities being analyzed in ongoing traffic study

#### **BIKE & PED INTERSECTION SAFETY**

NYC DOT has been developing new **traffic calming** designs to enhance bicycle and pedestrian safety at intersections



#### **BENEFITS**

- Expanded pedestrian space shortens crossing distances
- Opens up sight lines improving pedestrians' and cyclists' visibility
- Space for turning vehicles to wait without blocking travel lanes
- Requires less parking removal than mixing zones

#### PARKING IMPACTS

 Loss of ~4 parking spaces per block to accommodate pedestrian refuge islands (approximately 145 in CB 6)



# **Outreach**

Community input guiding project development



## **WORKSHOPS**

May 2, 2017
St. Thomas Aquinas Church
~100 participants

May 11, 2017
P.S. 136 Charles O'Dewey
~70 participants

July 12, 2017

Marien Heim Senior Center

~60 participants



Mapping exercises



#### WHAT WE HEARD



- Change regs to encourage parking twinover for biz districts.

- Cycling is unsafe now, protected bibe

- 65th - 40th lots of businesses - loading zone needed

NORTH BOUND PBL TO CONTINUE TO TIMES P.Z.

Double parking makes me avoid biking on 4th Ave - and 90 to other burnecses.

IMPROVED SAFETY
IS A PRIORITY
FOR ALL STREET USERS



## **ISSUE: DOUBLE PARKING**

Low parking turnover (especially on blocks without parking meters) prevents people from finding parking spaces near destinations on 4<sup>th</sup> Ave.

## Proposal:

- Conduct time-lapse parking study to identify areas where double parking is most prevalent
- Expand metered parking along blocks with the most:
  - active commercial uses,
  - frequent double parking (more than 10 instances/hr during peak)
  - transit connections



## **ISSUE: DOUBLE PARKING**

Most delivery vehicles cannot find legal parking near destination and are forced to double park and load from travel lane

## Proposal:

- Conduct merchant survey to determine loading/delivery needs of businesses on 4th Ave
- Establish sensible, consistent loading zones at locations with frequent or high-volume loading
- Maintain overnight parking for residents



## **ISSUE: BIKE NETWORK CONNECTIVITY**

Based on previous project's traffic analysis, high vehicular volumes preclude installation of northbound protected bike lane from Carroll St to Atlantic Ave; Rush hour lane from 38<sup>th</sup> St – Prospect Expy precludes protection during AM rush hour

## Proposal:

- Conduct new traffic study to determine current vehicular demands on 4<sup>th</sup> Ave
- Extend protected bike lanes as far north as possible and connect with existing east-west routes
- Remove or reduce extents of rush hour lane between 38th St and Prospect Expy



Phasing & Next Steps



## 4<sup>th</sup> Avenue

#### **Project Phase**

Interim In-House Project (38 St to 65 St)

Interim In-House Project (Atlantic Ave to 38 St)

Capital Project Ph. A (8 St to 64 St)

Capital Project Ph. B (Atlantic Ave - 8 St)

Nearby Planned Bike Projects

#### **Construction Start**

Spring 2018

Spring 2019

\* Original presentation to CB6 on 12/21/2017 omitted this phase

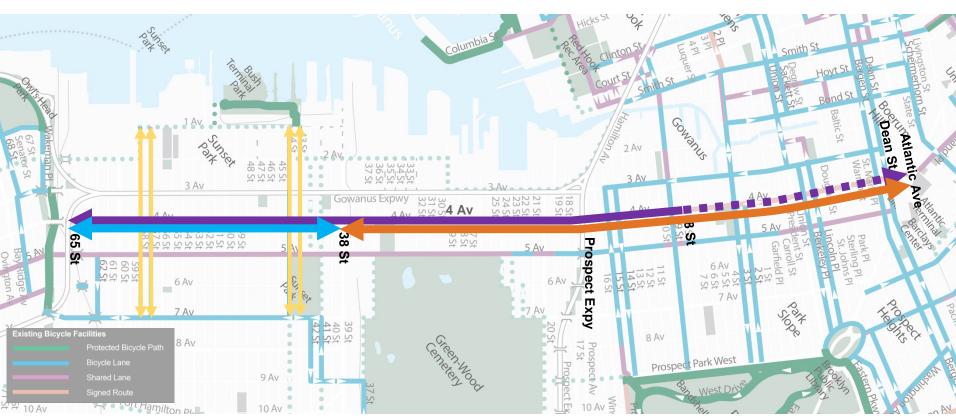
Fall 2019

\* Original presentation to CB6 on 12/21/2017 noted this phase as beginning in Fall 2018, which was incorrect

Fall 2021

\* Original presentation to CB6 on 12/21/2017 noted this phase as beginning in Summer 2021, which was incorrect

Spring 2018



## **MATERIALS**

## **In-house (interim)**



Paint, markings, temporary materials

## **Capital build-out (permanent)**

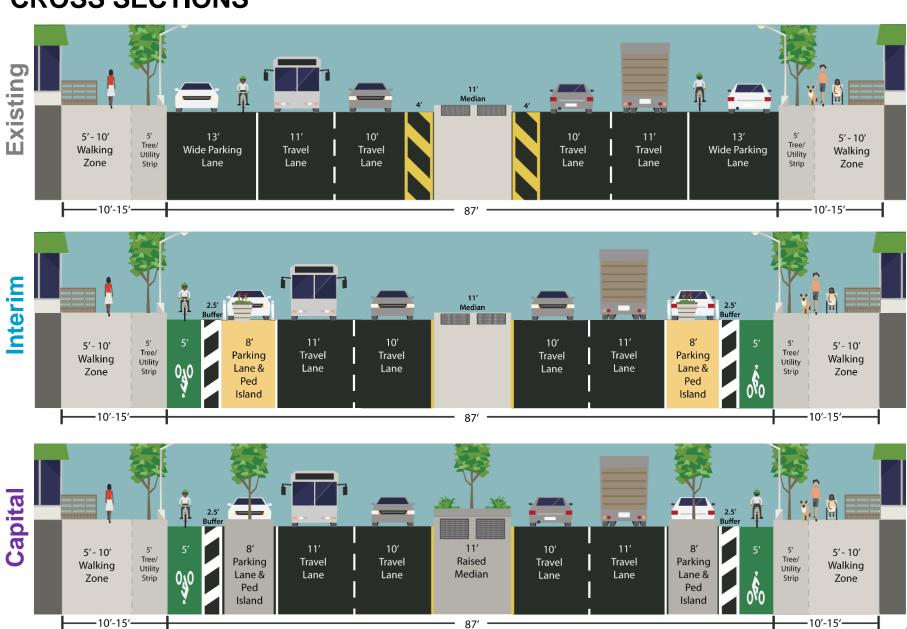


Concrete, landscaping, underground utilities

# **Summary**

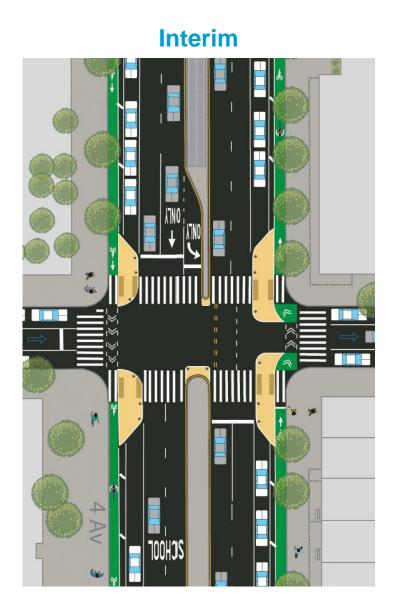


## **CROSS SECTIONS**



29

# **SITE PLANS**





#### **OVERVIEW**

## **Safety**

- Protected bike lanes
- Pedestrian refuge islands
- Maintain high-visibility crosswalks, leftturn restrictions & road diet

## **Traffic Operations**

- Maintain existing number of lanes and rush-hour lane (38th St to Prospect Av)
- Introduction of loading zones and expansion of metered parking
- Some parking loss to accommodate ped refuge islands (~4 per block, ~225 in CB 7)

## **Streetscape**

- Add plantings & trees (~200 in CB 7)
- Install wayfinding signs
- Add CityBenches

