



# MIDTOWN CROSSTOWN PROTECTED BIKE LANES

Presented to Manhattan Community Boards 4, 5, 6  
January 2018



## PRESENTATION OVERVIEW

1. Background
2. Proposed Routes
3. Route Details
4. Summary



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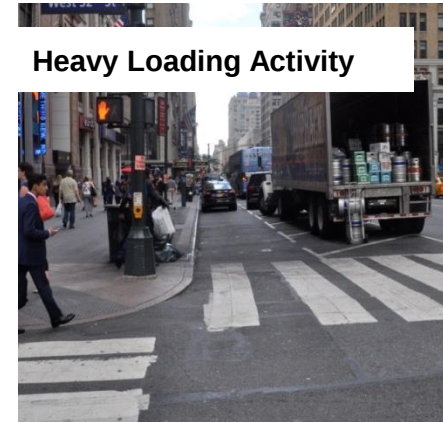
Background

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## Midtown 59<sup>th</sup> St to 13<sup>th</sup> St

*Heavy commercial activity, transportation hubs, and tourist destinations*

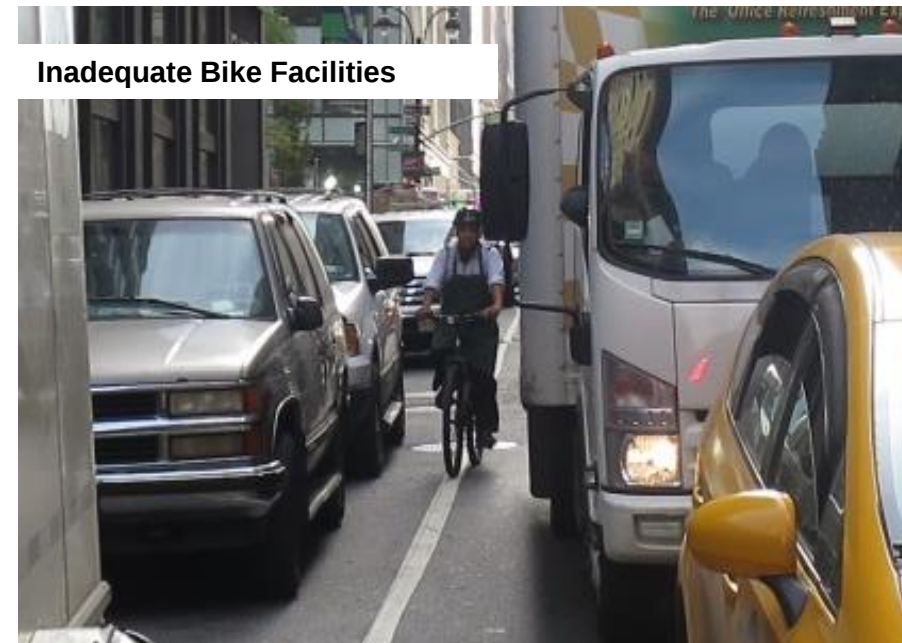
*Major attractions cause congestion for all users*



Heavy Loading Activity



High Pedestrian Volumes

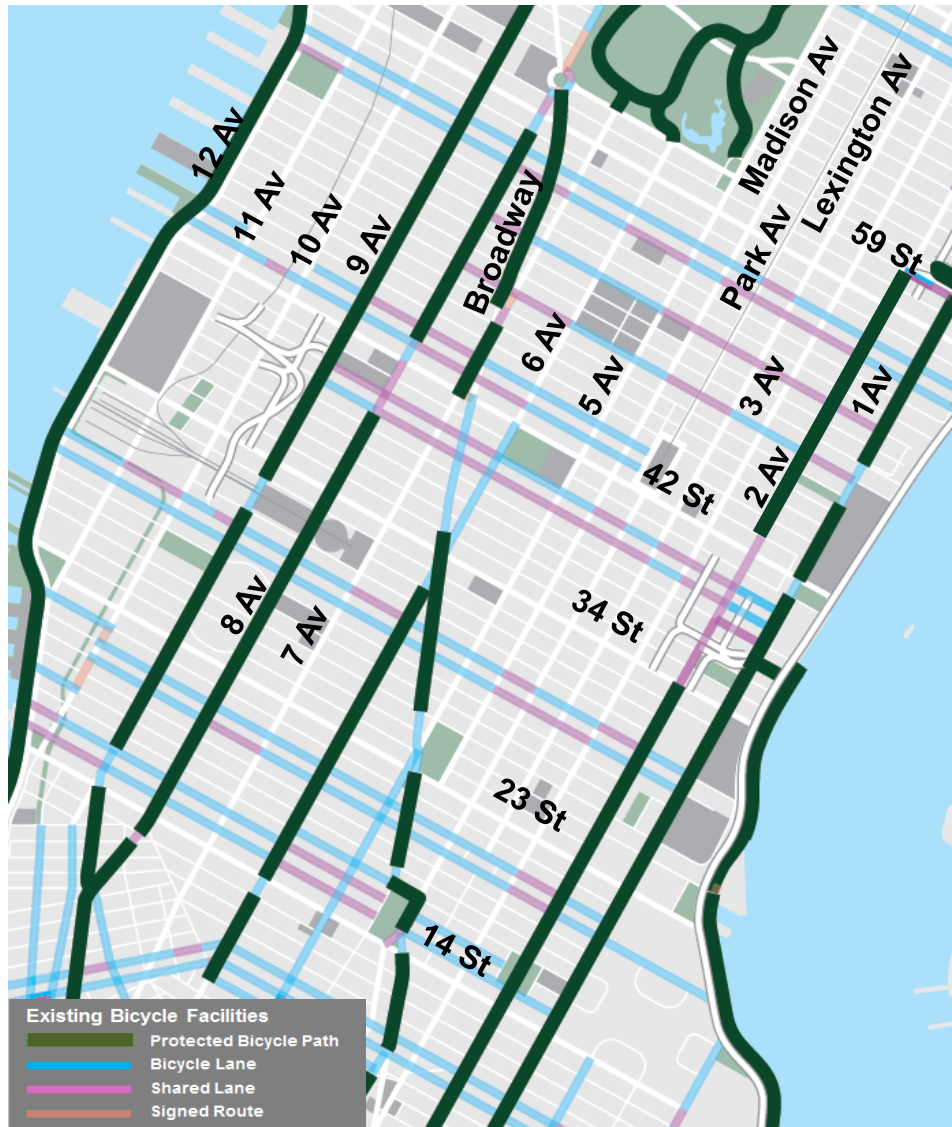


Inadequate Bike Facilities

## Midtown Biking

*Bike route network established with strong north – south facilities*

*Lack of cross town options contributes to safety issues*



### ***People are biking in Midtown***

- More than 25,000 bikes cross 50<sup>th</sup> St daily, 75% increase from 2006 to 2016
- 9,891 Citi Bike trips start and end in Midtown (compared to 15,837 taxi trips)
- **Bike commuting mode share is 1.9% for Midtown residents, compared to 1.2% citywide**

### ***Biking is an efficient option for trips in Midtown but there are deterrents***

- Citi Bikes are faster and cheaper than taxis
- Protected bike lanes on avenues, lack of protected crosstown routes

### ***Safety concerns are a barrier to increased ridership***

- 10% more women bike in protected bike lanes than in unprotected bike lanes (50th St count)

## Midtown Bicyclist Safety

### Cyclist Fatalities: 2006 to Present



***Cyclist fatalities remain low, despite dramatic growth in cycling citywide***

***However, the majority of cyclist fatalities have occurred on streets without bike lanes***

### ***Recent crashes in Midtown***

**6/12/2017** W 26th St between 7th and 8th Aves

*No bike lane*

**6/17/2017** 7th Ave at W 29th St

*No bike lane*

**9/11/2017** 7th Ave at W 30th St

*No bike lane*

**9/24/2017** 21st St at 9th Ave

*Conventional bike lane*

***Community Boards 4, 5, and 6 are highest cyclist KSI in Manhattan***

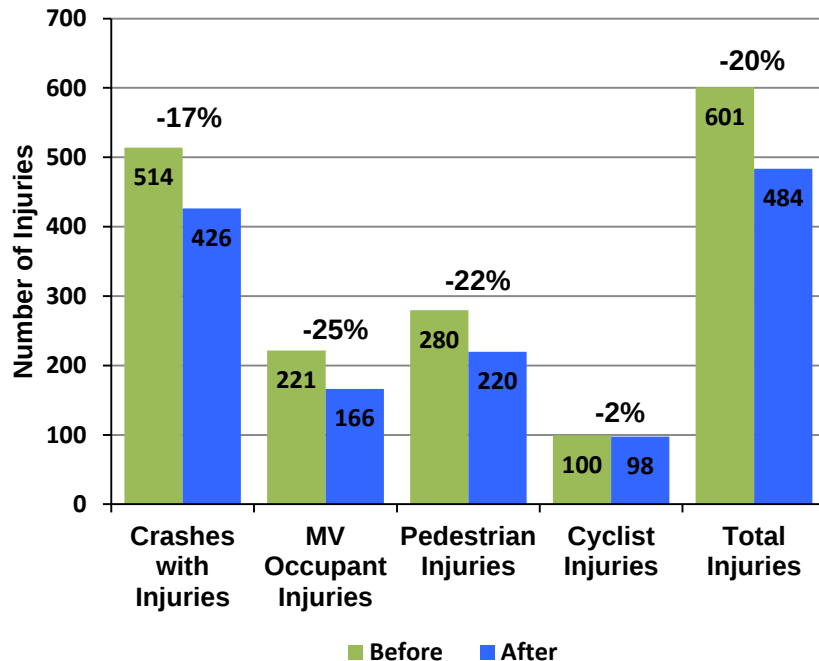
## Midtown Bicyclist Safety

Protected bike lanes in Manhattan improve safety for all users.

On streets with protected bike lanes:

- Total injuries have dropped by 20%
- Crashes with injuries have been reduced by 17%
- Pedestrian injuries are down by 22%
- Cyclist injuries have decreased even as bicycle volumes have dramatically increased

### Protected Bicycle Lanes Before and After Installation



Protected bicycle lane projects with 3 years of after data include the following: 9<sup>th</sup> Ave (16<sup>th</sup>-31<sup>st</sup>), 8<sup>th</sup> Ave (Bank-23<sup>rd</sup>, 23<sup>rd</sup>-34<sup>th</sup>), Broadway (59<sup>th</sup>-47<sup>th</sup>, 33<sup>rd</sup>-26<sup>th</sup>, 23<sup>rd</sup>-18<sup>th</sup>), 1<sup>st</sup> Avenue (Houston to 34<sup>th</sup>), 2<sup>nd</sup> Ave (Houston-34<sup>th</sup>), Columbus Ave (96<sup>th</sup>-77<sup>th</sup>) Note: Only sections of projects that included protected bicycle lanes were analyzed.  
Source: NYPD AIS/TAMS Crash Database

## Midtown Bicycle Ridership Growth

*Ridership has grown in the Citi Bike Service Area*

In Midtown, there were **6 million** Citi Bike trips in 2017 alone.

Citi Bike data shows:

- *Yearly subscribers ride frequently around transportation, economic and residential hubs*
- *Daily users ride to and from tourist hot spots*

For all trips that begin and end in the Midtown Core, Citi Bikes are at least **2 mph faster** and **\$6 cheaper** than taxis.



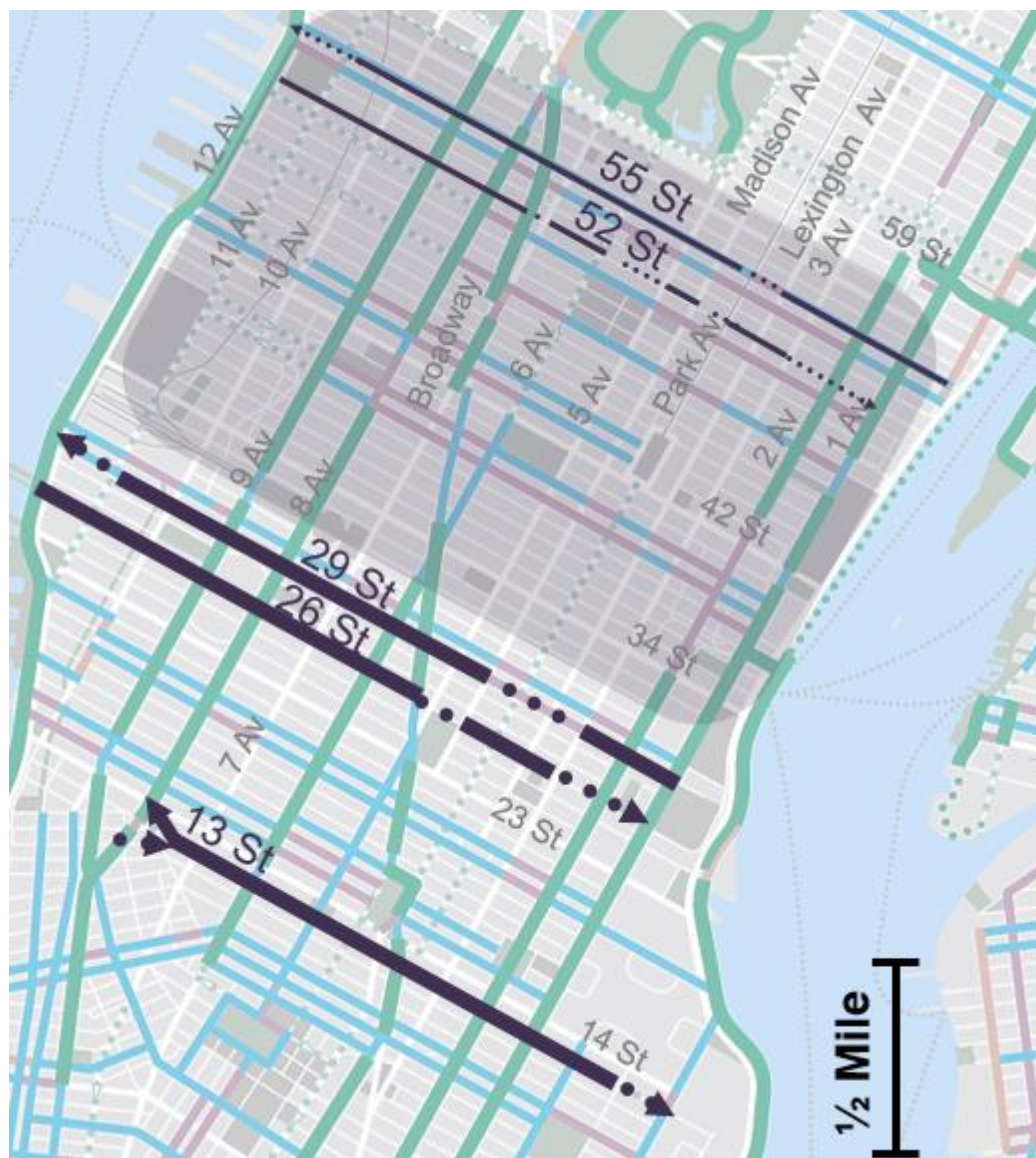
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## Proposed Crosstown Routes & Design

# 2

## Crosstown Bike Routes Strategy

Proposed Routes - accessible every ½ mile through Midtown



**USq**

**Union Square**  
**13th St**

*Part of L Train Mitigation*

**MSq**

**Madison Square**  
**26<sup>th</sup> St and 29<sup>th</sup> St**

*In Development / Planning*

**CPS**

**Central Park South**  
**52nd St and 55th St**

*In Development/ Planning*

**TSq**

**Times Square**  
**Area Under Study**

*In Development*

-  Protected Bike Lane
-  Conventional or Shared Bike Lane
-  Area Under Study

## Proposal Overview

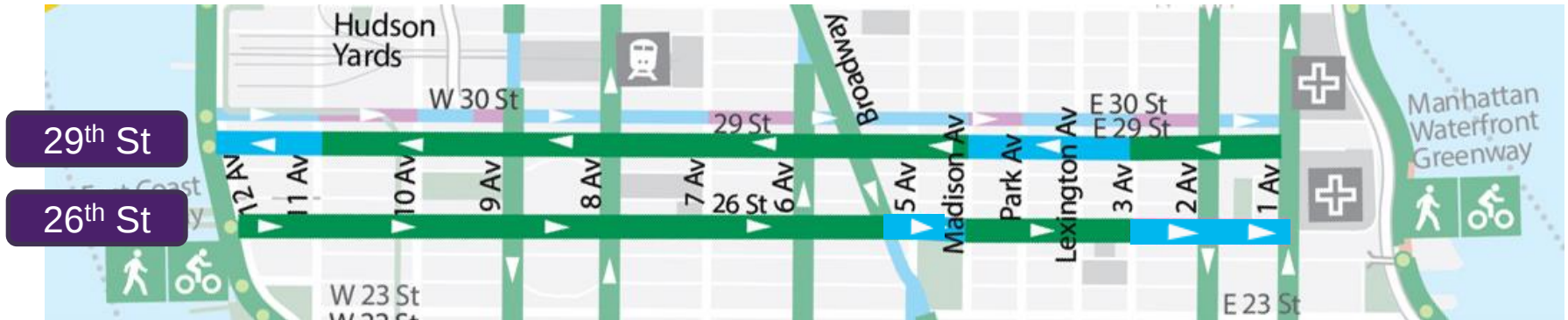
### Project Goals

- Install new protected crosstown bicycle lanes and upgrade existing bicycle lanes
- Improve crosstown bicycle access to destinations, transit and greenways
- Use redesign to alleviate traffic and loading pressure

### Proposed Routes

#### *Madison Square Routes*

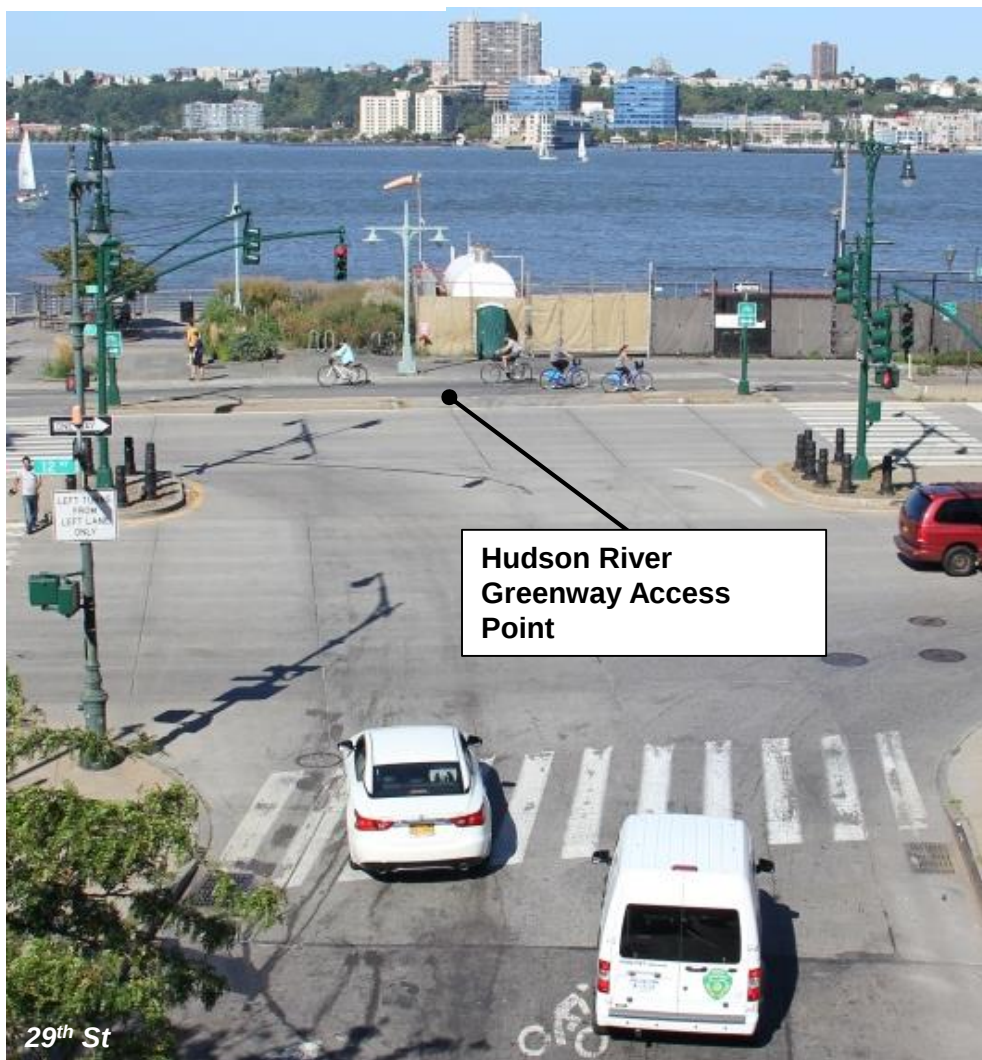
- ① 26<sup>th</sup> St
- ② 29<sup>th</sup> St



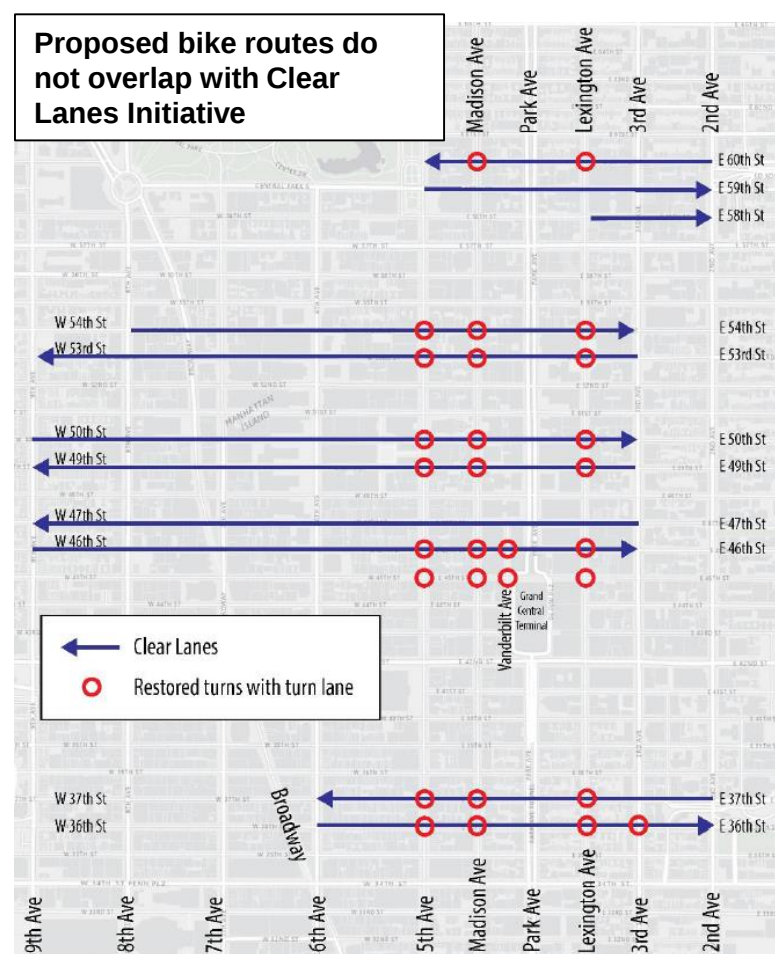
# Crosstown Bike Routes Route Selection

*Why did we choose these streets?*

## 1. Greenway Connections



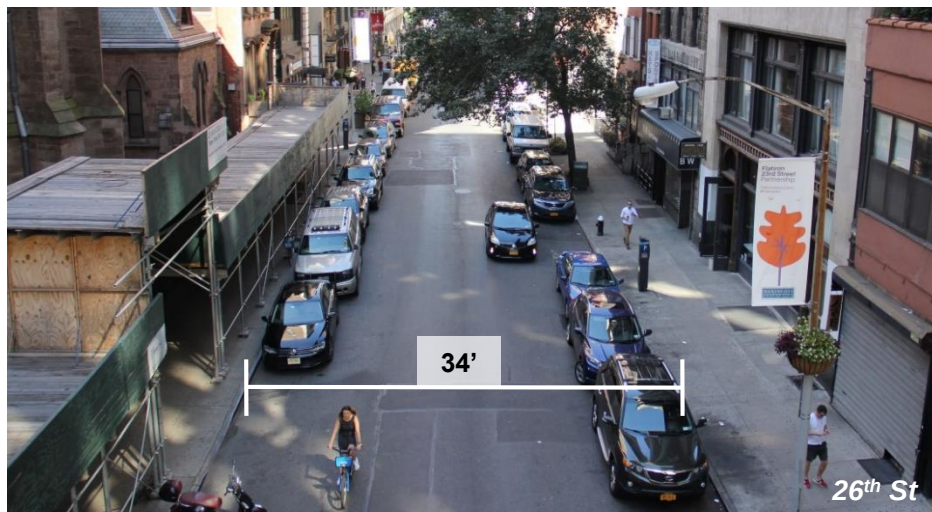
## 2. Complements Congestion Management Plan



## Crosstown Bike Routes Route Selection *continued*

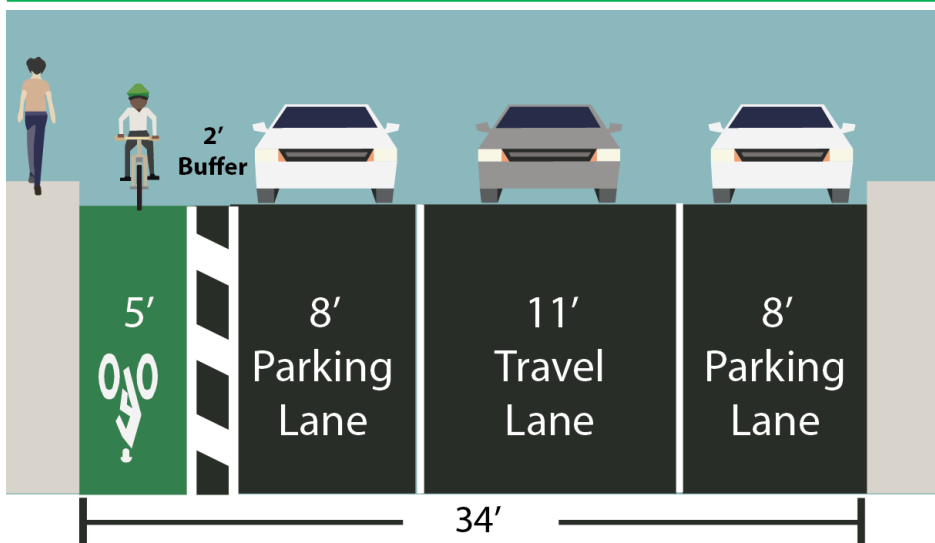
*Why did we choose these streets?*

### 3. Street Width and Connectivity



- Uninterrupted from Hudson River Greenway to 1<sup>st</sup> Avenue
- Wide enough to fit a protected bike lane for most of the corridor
- Have more 34' – wide blocks than adjacent streets

### Protected Bike Lane *Typical*



## Curb Management

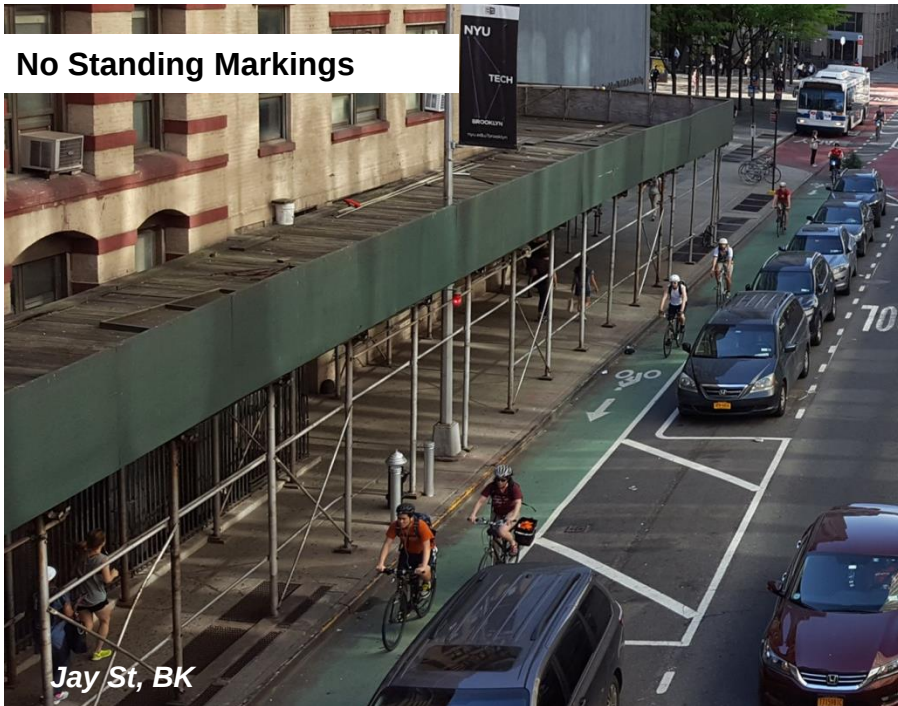
### Accommodations for land uses

- Hotels / commercial floating loading
- Theaters / loading zones
- Update parking regulations to mitigate double parking
- Additional locations delineated for pick ups/drop offs
- Maintain emergency access with No Standing zones

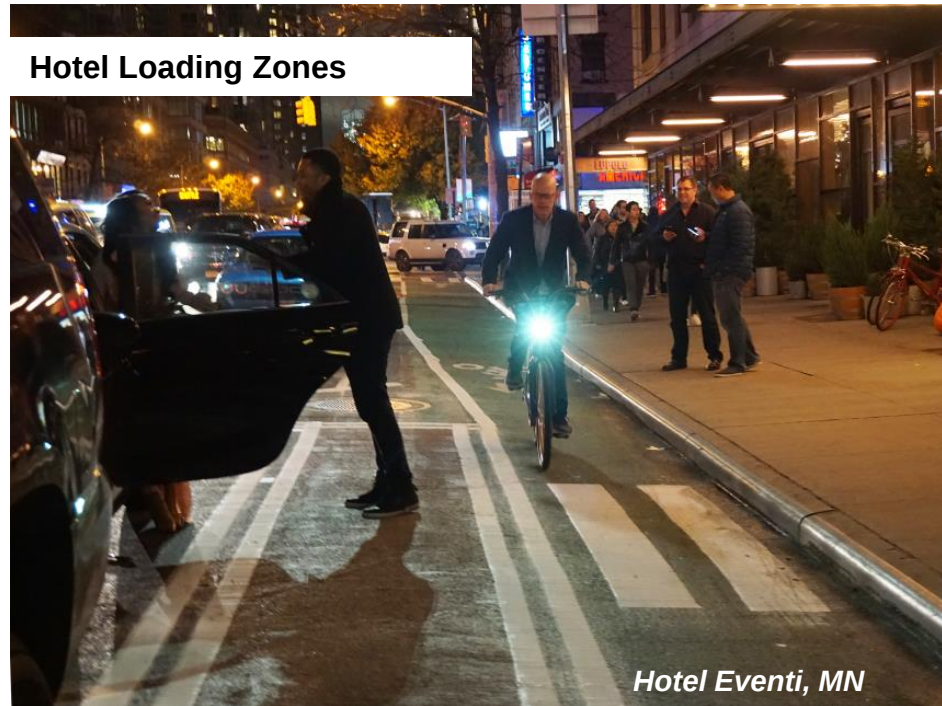
Adjusted Loading Zones



No Standing Markings



Hotel Loading Zones



Hotel Eventi, MN

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26<sup>th</sup> St and 29<sup>th</sup> St

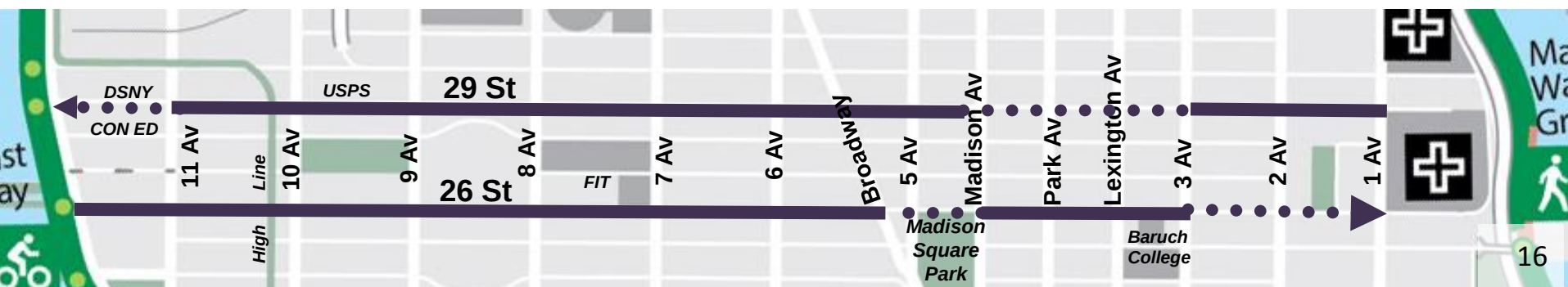
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# Madison Square Corridor

MSq

- Connections to Madison Square Park, Bellevue Hospital, colleges, commercial uses, multi-family residences, industrial uses

## Corridor Characteristics



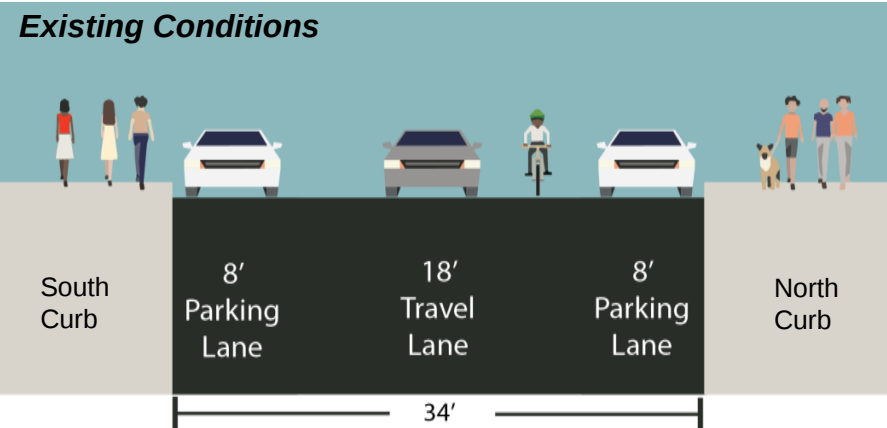
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26<sup>th</sup> St

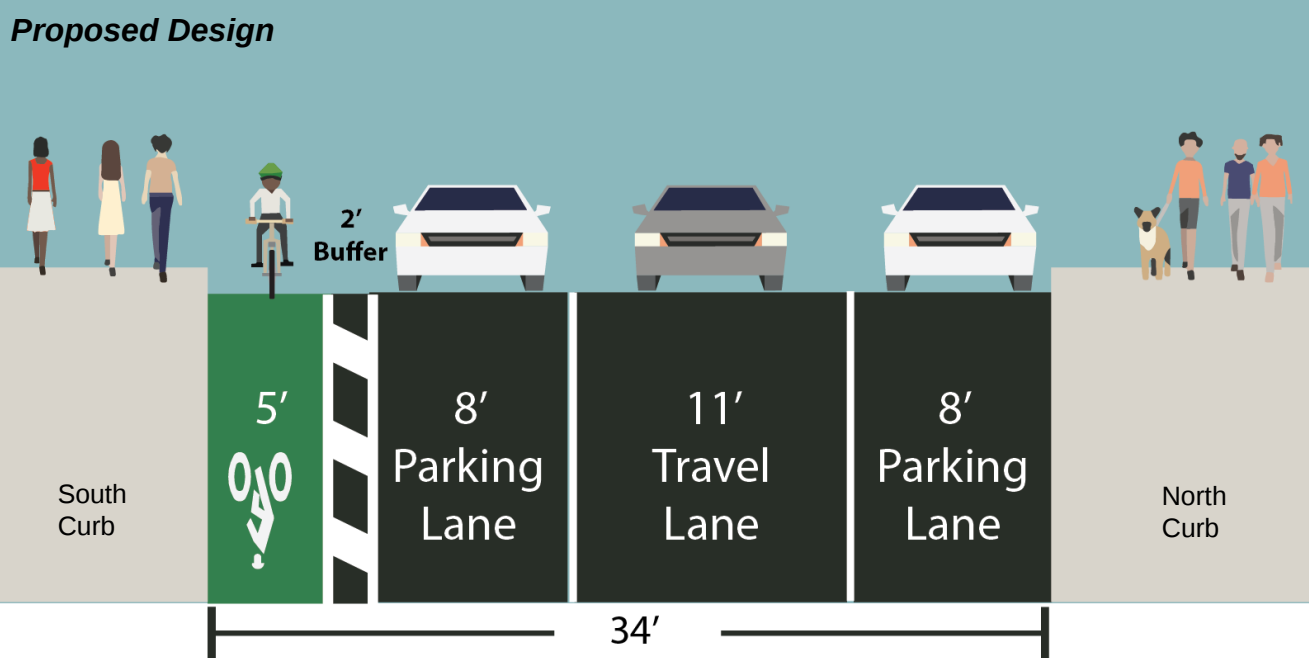
12 Ave – 9 Ave,  
8 Ave - Broadway  
Madison Ave – 3 Ave



Existing Conditions



Proposed Design



- Land Use: commercial, multi-family residence, colleges
- West side loading docks
- Parking Loss: approximately 2 to 9 spaces per avenue block (commercial / residential regs)
- Intersection Design: mixing zones for right turns across bike lane

1

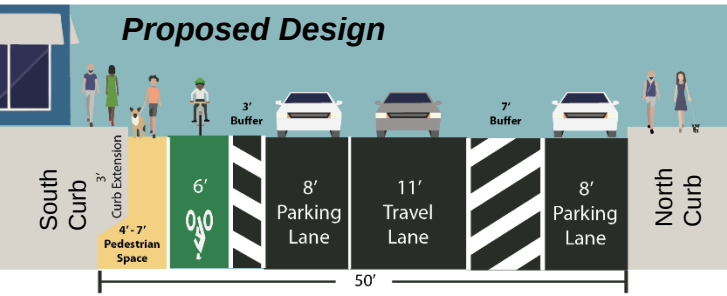
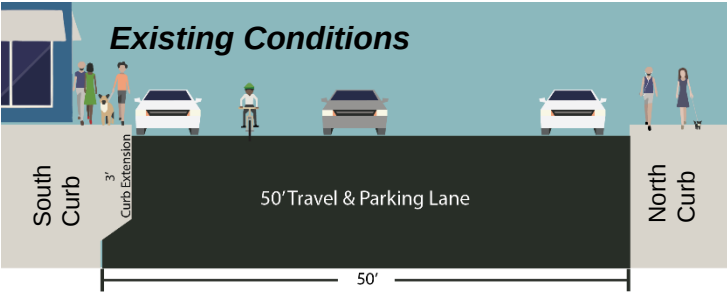
26<sup>th</sup> St

Atypical Blocks



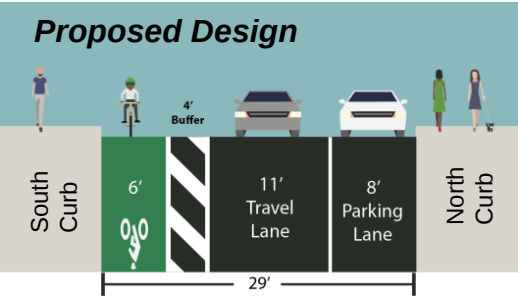
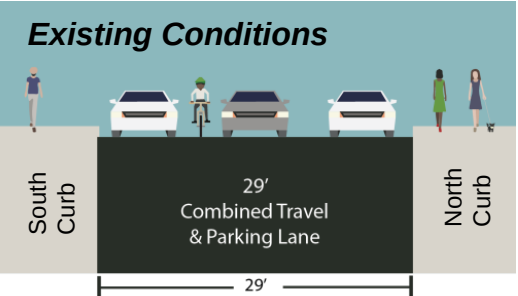
9 Ave – 8 Ave

Extra wide block



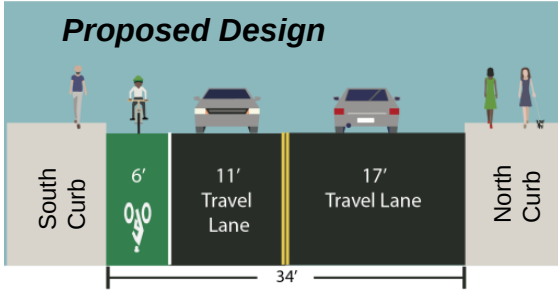
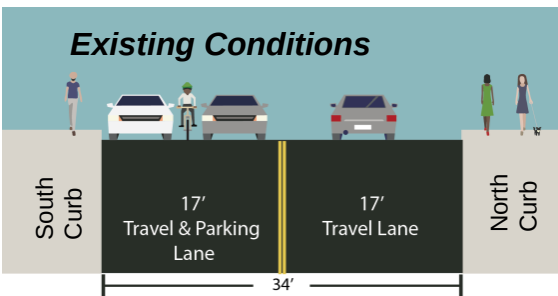
Broadway – Madison Ave,  
3 Ave – 2 Ave

Curbside lane will  
require parking removal



2 Ave – 1 Ave

Two-way block presents alignment  
challenges, curbside lane will  
require parking removal



- Land Use: park edge, commercial, multi-family residential
- Intersection Design: mixing zones and right turn lanes
- Parking loss 82 spaces (Broadway– Madison Ave, 3<sup>rd</sup> Ave – 1<sup>st</sup> Ave)

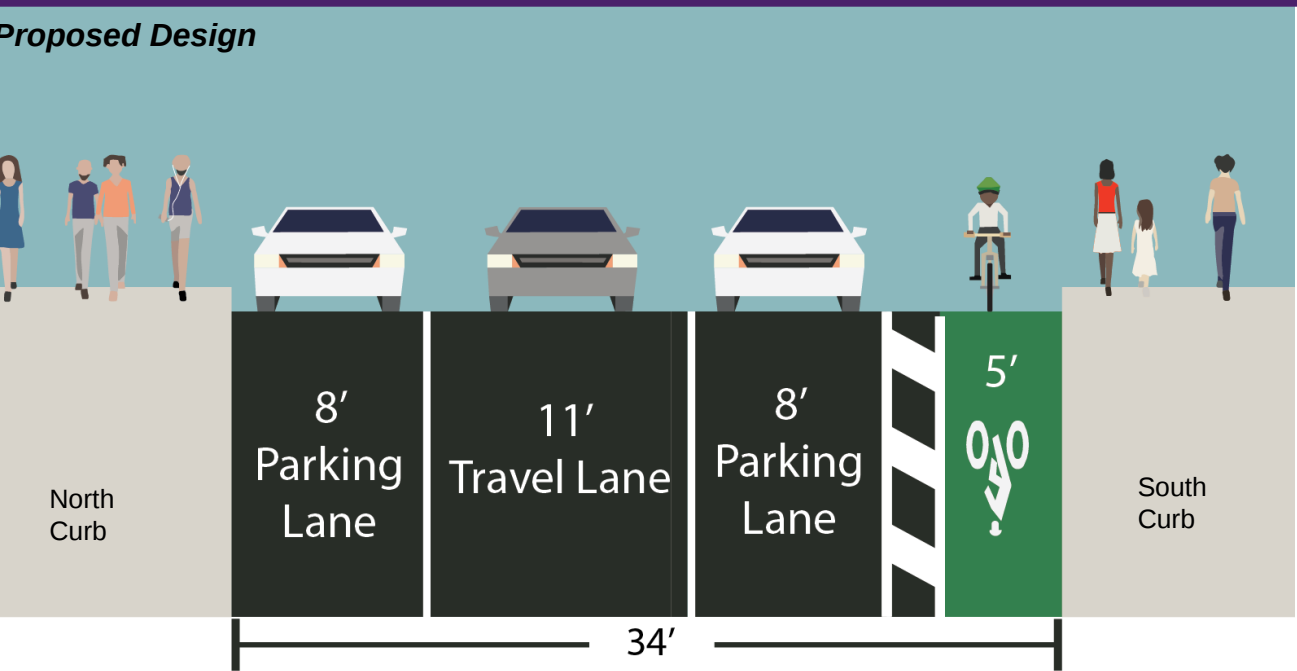
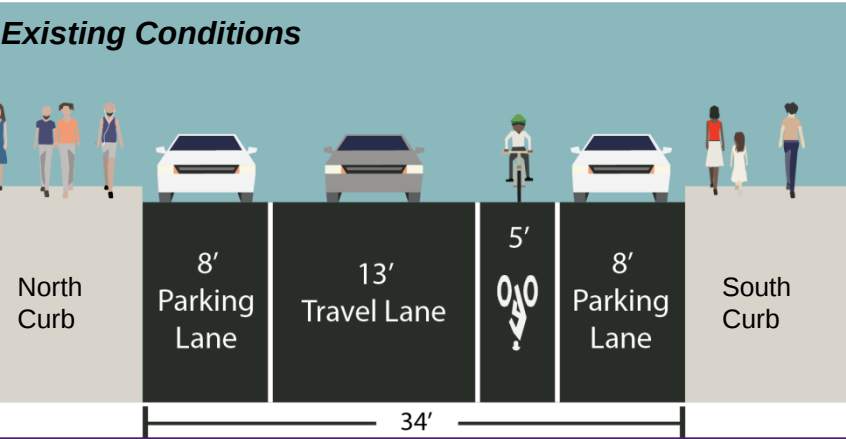
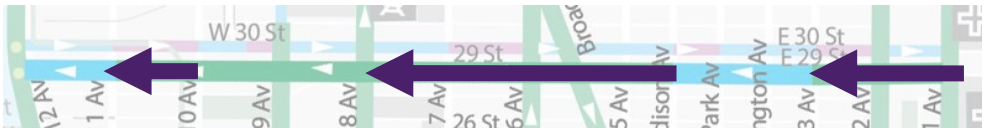
2

29<sup>th</sup> St

10<sup>th</sup> Ave – 9<sup>th</sup> Ave

8<sup>th</sup> Ave - Madison Ave

3<sup>rd</sup> Ave – 1<sup>st</sup> Ave



- Land Use: Commercial, Multi-Family Residence
- Enhances existing conventional bike lanes
- Parking Loss: approximately 2 to 8 spaces per avenue block (commercial / residential regs)
- Intersection Design: mixing zones for left turns across bike lane, turn lanes for right turns

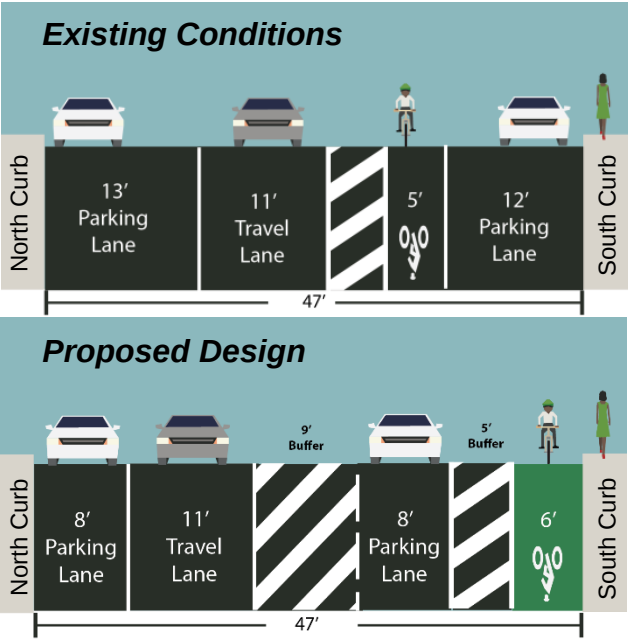
2

29<sup>th</sup> St

Atypical Blocks

9 Ave – 8 Ave

Extra wide block

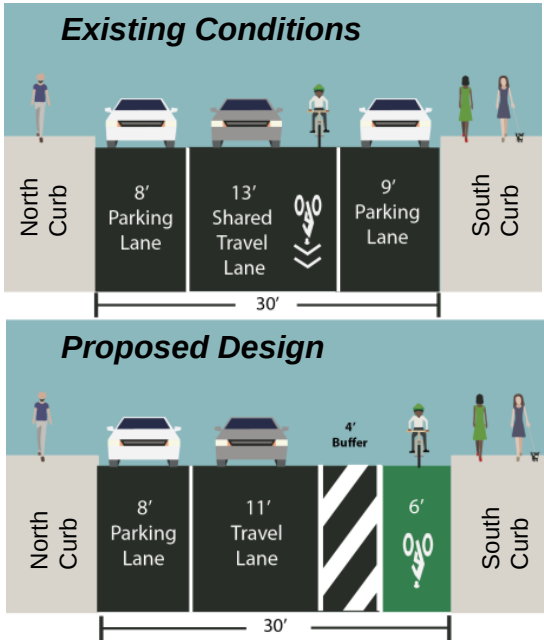


- Land Use: commercial, multi-family residential
- Intersection Design: mixing zones for left turns across bike lane, turn lanes for right turns



Madison Ave – 3 Ave

Curbside lane will require parking removal



- Parking Loss: 37 spaces (Madison Ave – 3<sup>rd</sup> Ave)

2

29<sup>th</sup> St

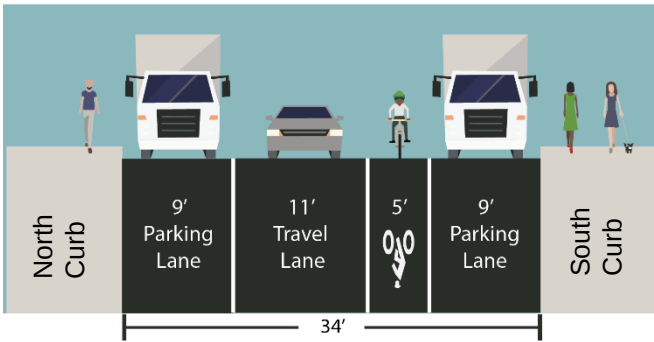
Atypical Blocks



12 Ave – 11 Ave

*Parking along both curbs*

**Existing Conditions**

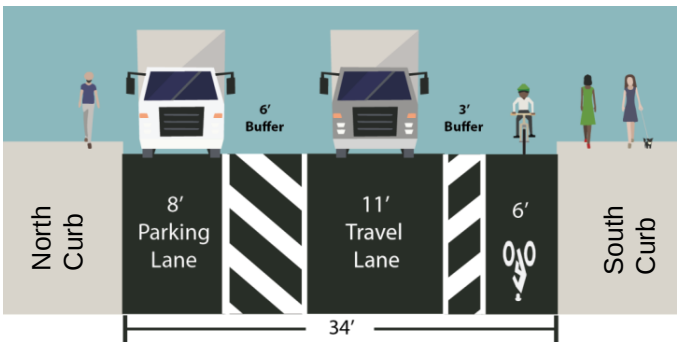


- Intersection Design: left and right turn lanes
- Land Use: industrial - DSNY Parking, Con Edison

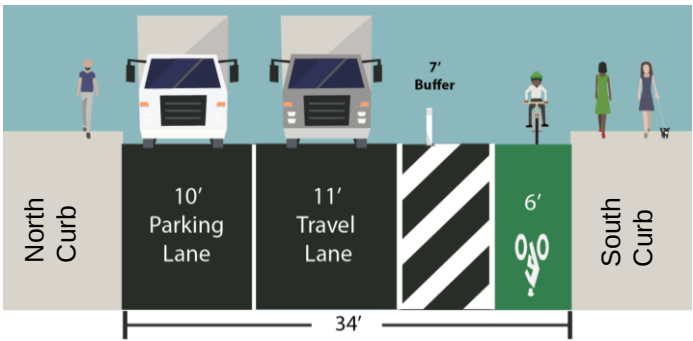
10 Ave – 9 Ave

*USPS loading docks on north curb*

**Existing Conditions**



**Proposed Design**



- Intersection Design: right turn lane
- Land Use: industrial - USPS facility

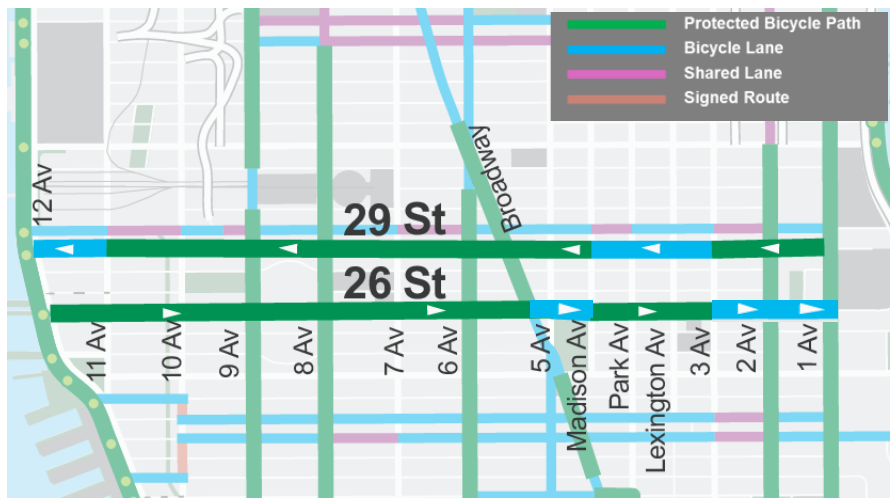
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Summary

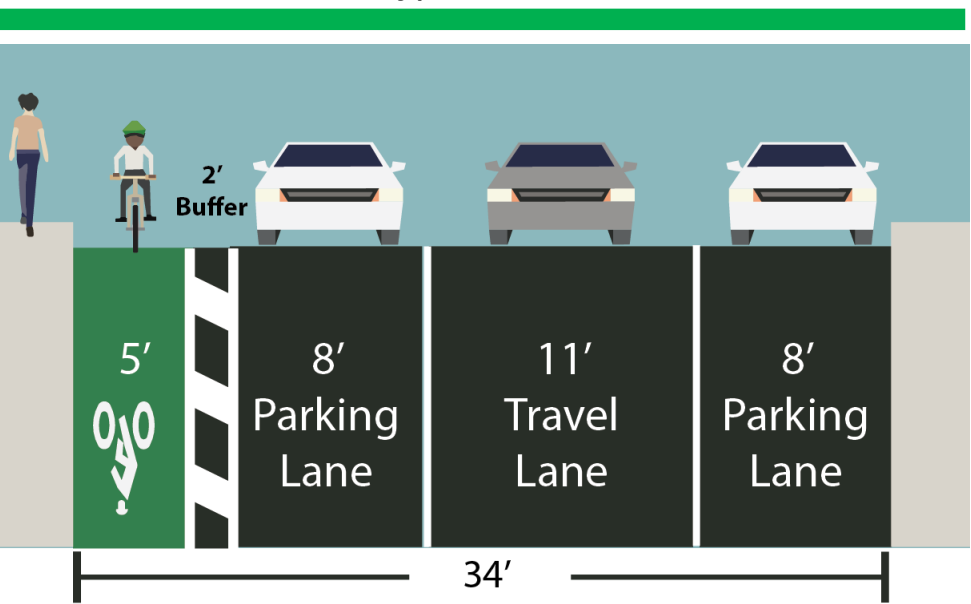
4

# Summary: Proposed Design

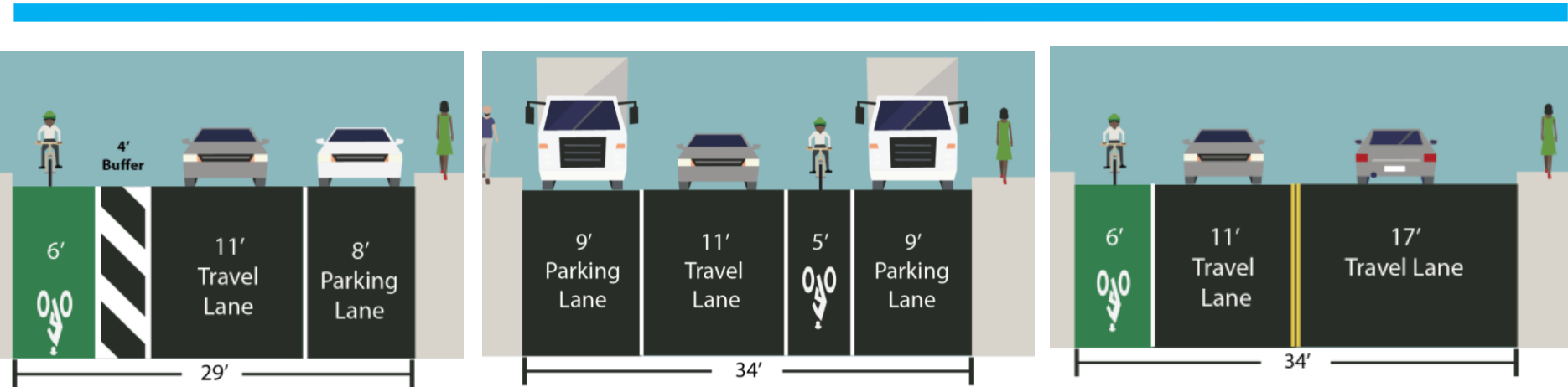
## Proposed Bike Routes



## Protected Bike Lane Typical



## Conventional Bike Lanes Typical



## Summary: Proposed Design

### Design Benefits

#### Cyclist Safety

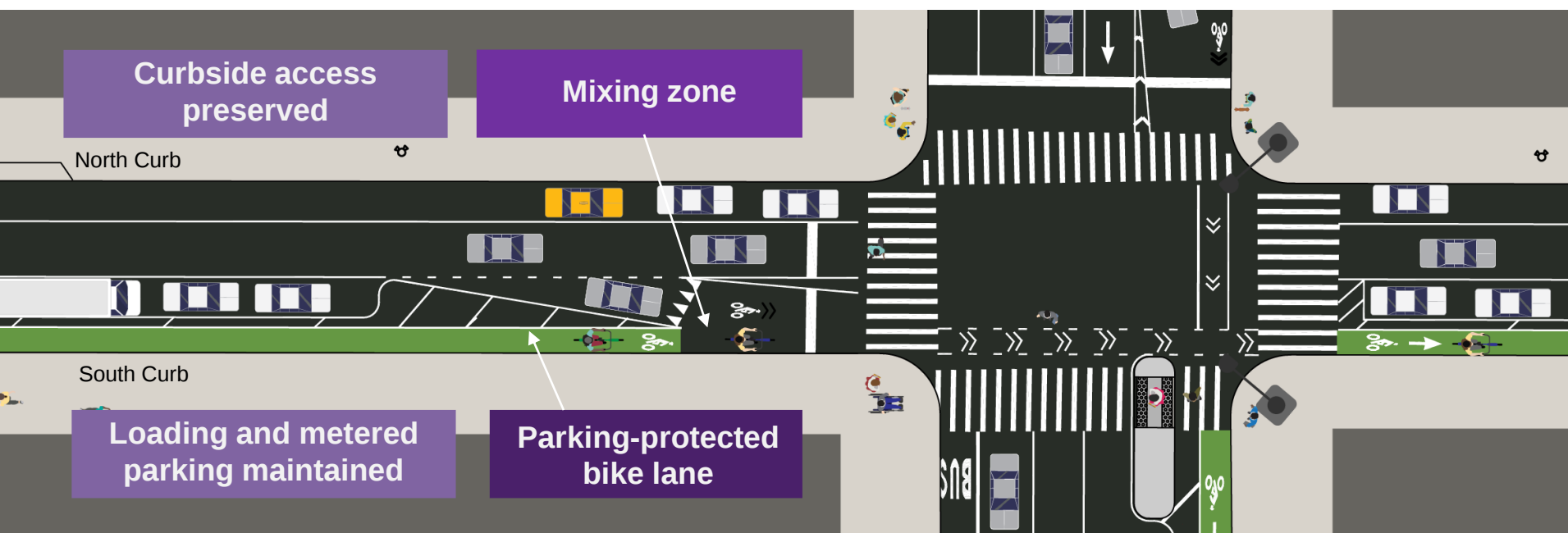
- Cyclists are separated from traffic by parked cars

#### Simplified Vehicular Movements

- Ease congestion by providing space for turns
- Mixing zones reduce back pressure on turning vehicles

#### Curb Management

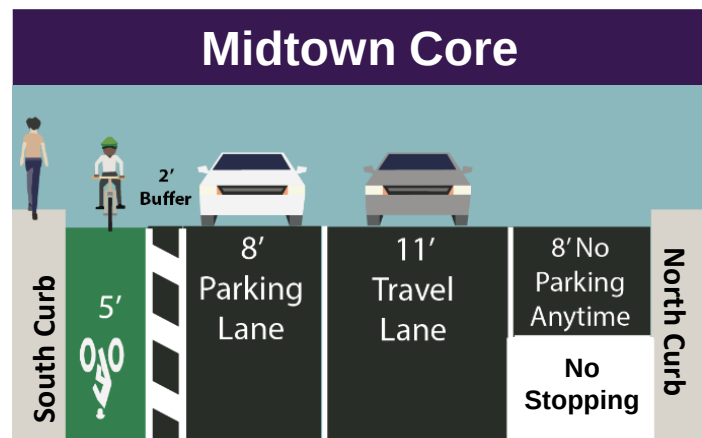
- Preserves loading and curbside access



## Summary: Making it Work

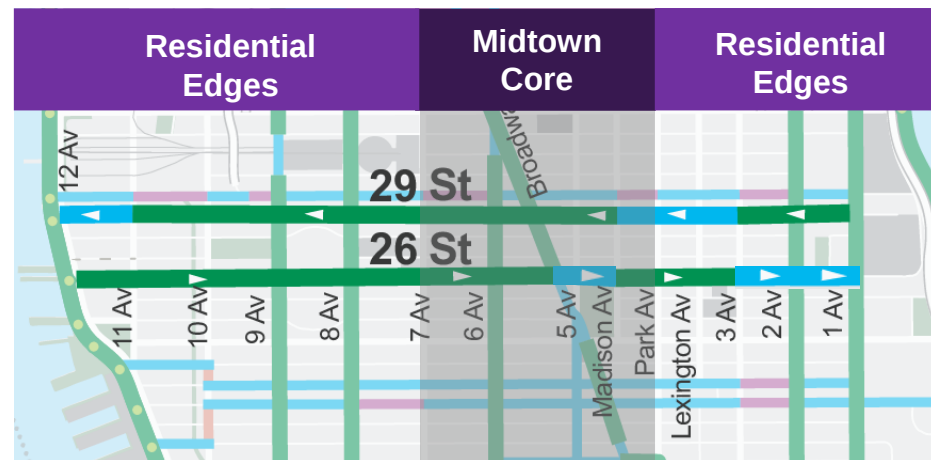
### Curb Management

*Remove some long term vehicle storage, but preserve short term curbside access and emergency clearance in the commercial Midtown core blocks*

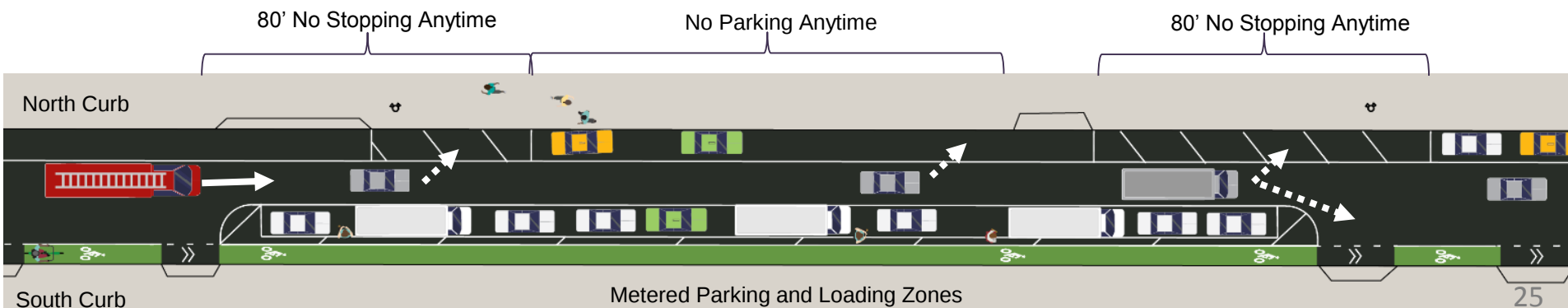


#### North Curb

- *Restrict curbside use, while allowing short term access*
  - Increase No Parking zones
  - Existing loading zones will have to be maintained where necessary



- *Emergency Access*
  - 80' No Stopping Anytime zones (2-3 per block, sited at hydrants and driveways to minimize impact)



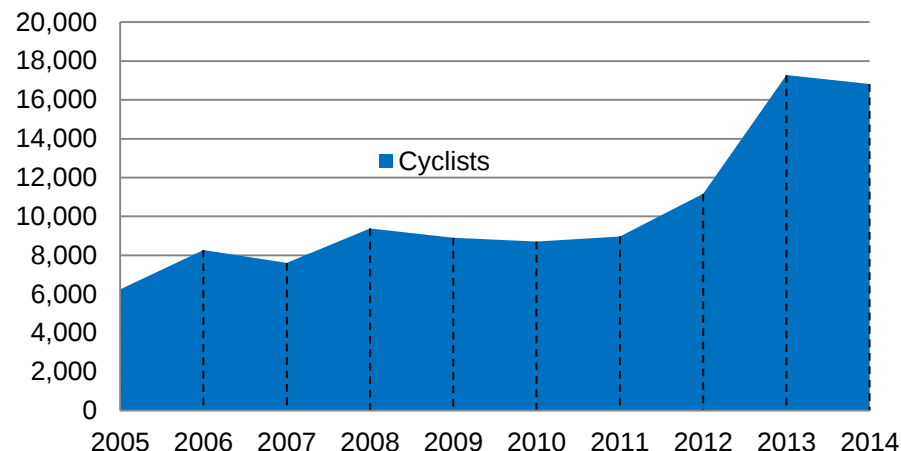
## Summary: Making it Work

### Congestion Management

- Continue to accommodate growth of midtown bicycle ridership



### Manhattan Bike Commuting



**Taxis are used heavily in Midtown, but bikes are faster, cheaper, and bicycle ridership is growing**

**98%** Growth in commuting to work by bike in Manhattan between 2010 and 2015, the largest growth of any borough

**74.9%** Growth in number of cyclists crossing 50<sup>th</sup> St between 2006 and 2016

**31%** of adult New Yorkers living near bike share cycled in 2013 and 2014

## Next Steps

### 2018 Winter

- Community Board Presentations (26<sup>th</sup> St, 29<sup>th</sup> St)
- Design Adjustments made with Community Feedback
- Finalize Central Park South Corridors (55<sup>th</sup> St, 52<sup>nd</sup> St)

### Spring - Summer

- Updated Community Board Presentations (26<sup>th</sup> St, 29<sup>th</sup> St, 52<sup>nd</sup> St, 55<sup>th</sup> St)
- Phased Implementation of select routes

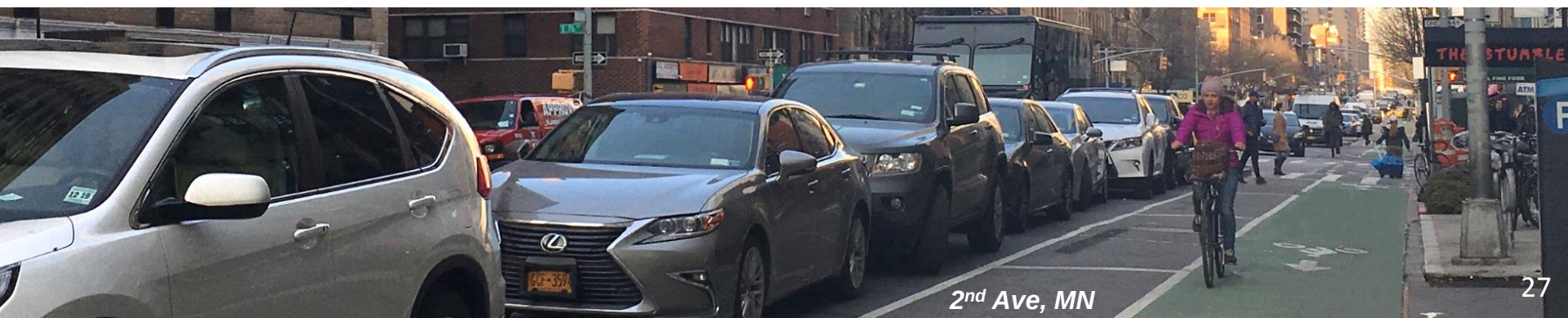
### Fall

- Community Board Presentations (*Times Square Corridors*)

### 2019 Spring – Fall

- Complete Implementation of all Crosstown Routes

*Note: 13<sup>th</sup> St will be presented during L Train Mitigation project outreach*



# THANK YOU!

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## Questions?



NYC DOT



NYC DOT



nyc\_dot



NYC DOT