

Second Avenue Bus and Bike Lane Enhancements

Community Board 6 Transportation Committee | March 4, 2024



Agenda

1. Background
2. Proposal: 59th Street to Houston Street
3. Summary and Next Steps

Background on 2nd Avenue

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Existing Bus Service on 2nd Avenue




- Served by the M15 Local and M15 SBS
- Total daily ridership of 57,000 - busiest bus route in NYC
- Buses scheduled as frequently as every 3 minutes in AM and PM peaks
- **Average bus speeds: 5.5 mph (local) / 7.6 mph (SBS)**

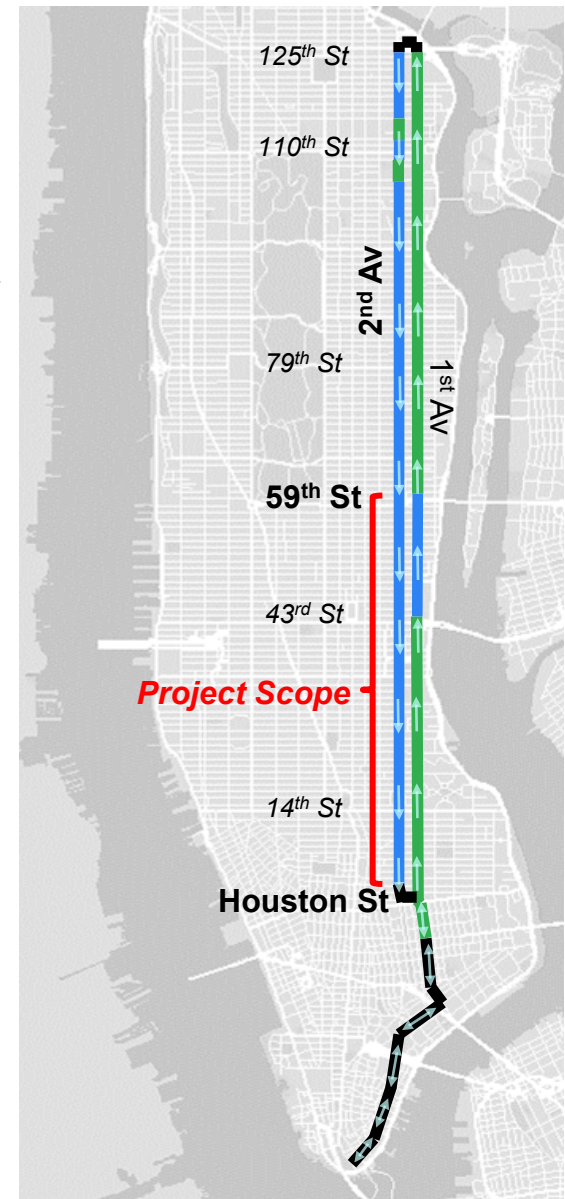


Bus lane during AM Peak, 2nd Ave at 32nd St

Existing Bus Priority Overview

- M15 Select Bus Service (SBS) launched October 2010 with a mix of curbside and offset bus lanes
 - Offset bus lanes, 24/7
 - Curbside bus lanes, weekdays 7-10am & 2-7pm. Midday and overnight parking and/or commercial loading
- Initial bus speed gains have eroded over time
- Project focus: 2nd Ave from 59 St to Houston St
 - Upcoming project on Allen St and Pike St for improvements south of Houston St

-  Existing Offset Bus Lane
-  Existing Curbside Bus Lane
-  No Existing Bus Lane



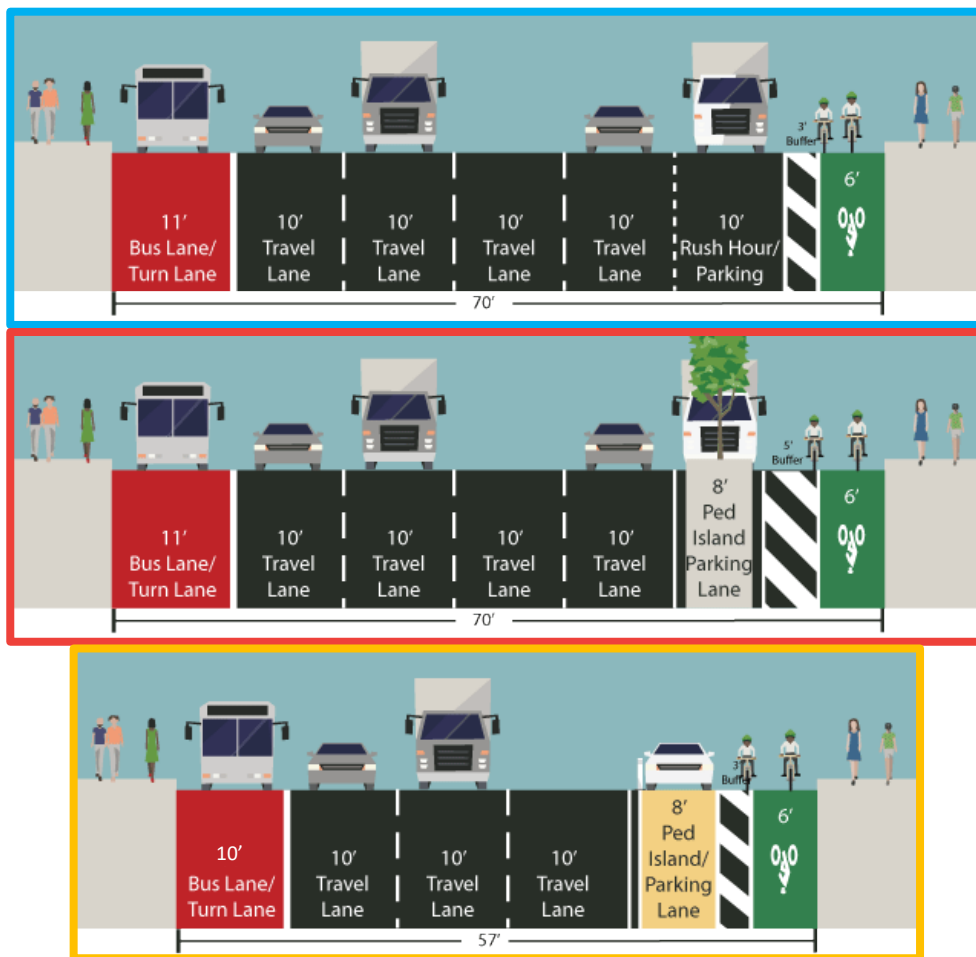
M15 Local and M15 SBS Route

Existing Bike and Safety Elements

- Protected bike lanes were installed along 2nd Ave between 2010 and 2021
- 2nd Ave serves as the only continuous southbound bike lane on the East side
- The 2nd Ave bike lane serves over 6,000 cyclists and micromobility users daily
- Much of corridor contains concrete or painted pedestrian spaces
 - They buffer cyclists from traffic and provide shorter crossing distances for pedestrians



Existing Cross Section – 59th St to Houston

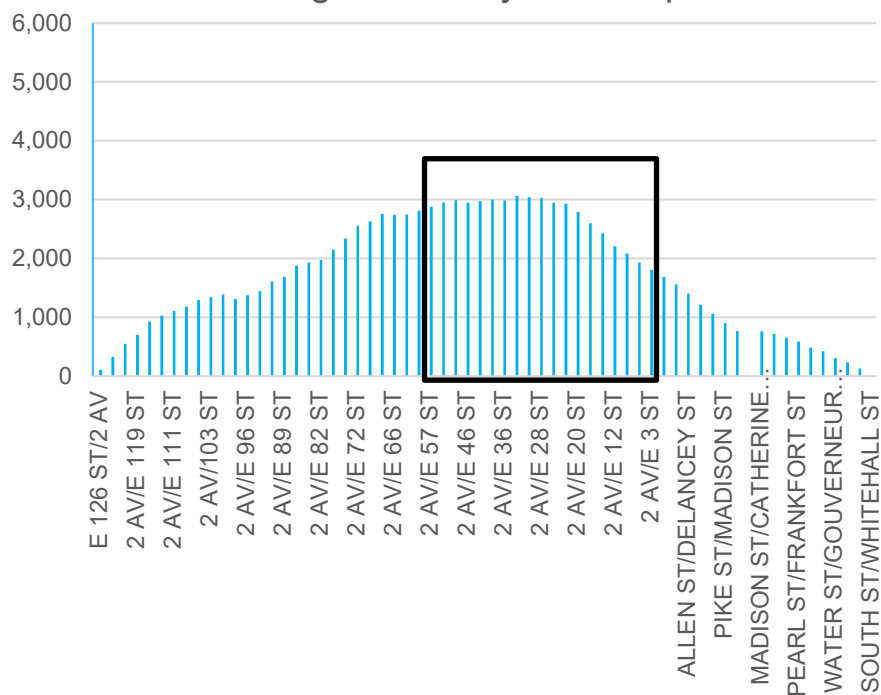


Bus Speeds on 2nd Av – 59 St to Houston St



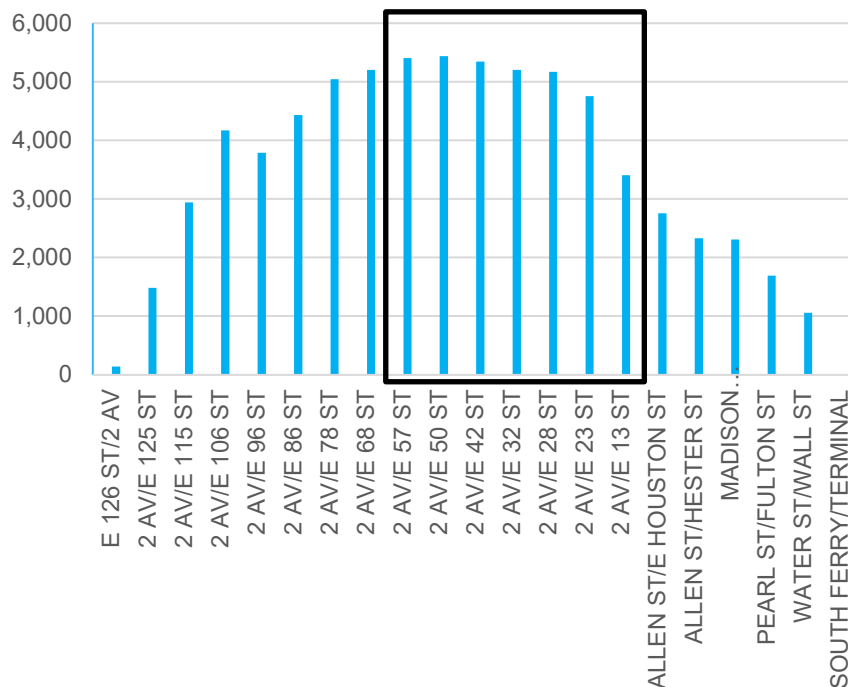
Bus Ridership on M15 Local & Select Bus Service

M15 Local Southbound - October 2023
Average Weekday Ridership



Ridership above 2,500 at most local stops between 59 St and Houston St

M15 SBS Southbound - October 2023
Average Weekday Ridership

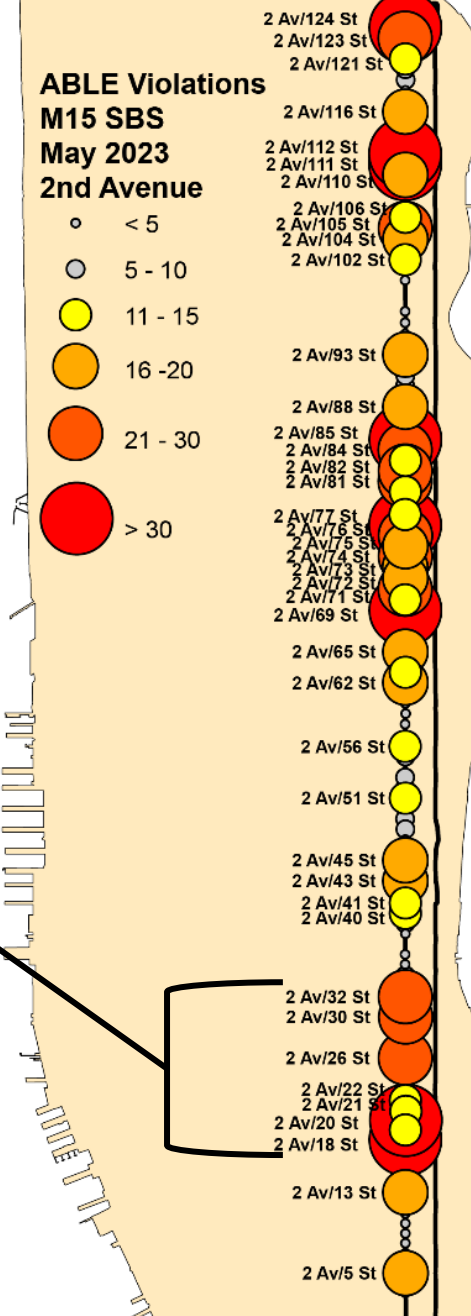


Ridership above 5,000 at most SBS stops between 59 St and Houston St

Note: Ridership shown is the sum of passengers riding on all buses leaving a location in a day ("Leave Load"). Data obtained from MTA.

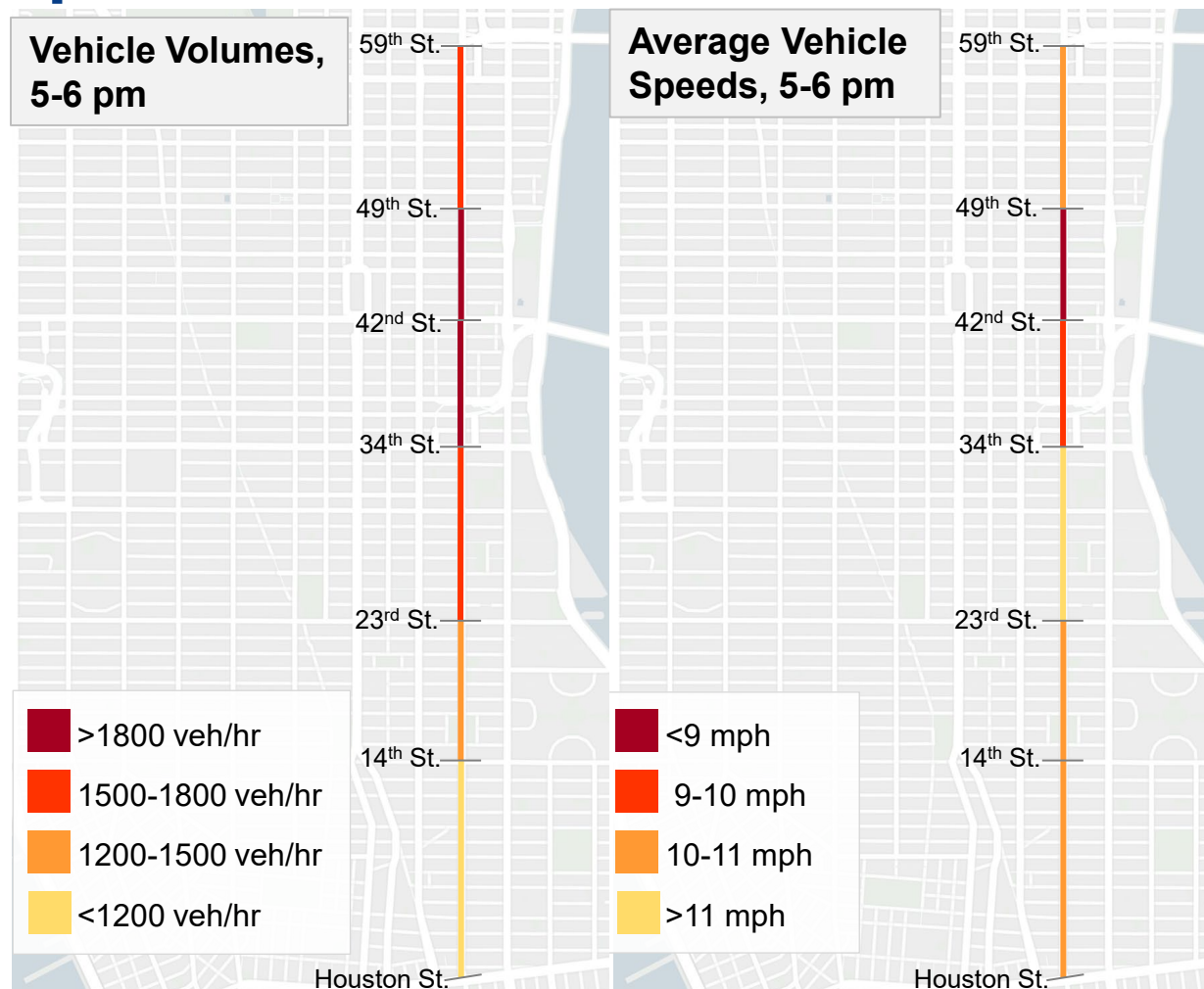
Bus Lane Violations

- Automated Bus Lane Enforcement (ABLE) was introduced in 2019
 - Bus-mounted cameras target vehicles parked in the bus lane
- Large concentration of violations on 2nd Ave especially from **32nd St to 14th St**
- Highest violation hotspots:
 - 2nd Av / E 124th St
 - 2nd Av / E 18th St**
 - 2nd Av / E 111th St
 - 2nd Av / E 85th St
 - 2nd Av / E 20th St**



General Traffic Speeds and Volumes

- Preliminary traffic volumes about 1000 to 2000 vehicles between 5 and 6 pm
- Current volumes can be accommodated by 2 to 3 general travel lanes
- Slowest traffic speeds between 49th St and 42nd St, under 9 mph



Source: Speeds from INRIX May 2023, Volumes from automated traffic recorders taken December 1-9, 2023. Note that traffic data is preliminary and needs further processing.

Cycling in Numbers

Daily Cycling

773,000

ride a bike regularly

530,000

daily commuter trips by bike

116%

increase in daily cycling from 2009 to 2019

East River Bridges

21,000+

cyclists cross the East River bridges daily

15%

growth in cycling on all East River bridges from 2019 to 2020

35%

increase on the Queensboro Bridge from 2015 to 2020

Bike Share

34.6 million

Citi Bike trips taken in 2023

2.1+ million

Citi Bike trips in CB 6 in 2023

15%

of New Yorkers used bike share in 2018



Since bike lanes were introduced on 2nd Ave, cycling has continued to grow

- Today 2nd Ave is one of the busiest bike lanes in the city

Existing Conditions Summary

- Exclusively curbside bus lane from 59 St to Houston St
- Mostly parking protected and buffered 6 ft bike lane



2nd Ave at Stuyvesant Square with curbside protected bike lane and curbside bus lane

Existing Conditions: 2nd Ave, 59th St to Houston St

- Bus lane often blocked by parked delivery vehicles, cars & for-hire vehicles
- Demonstrated demand for Open Restaurants and commercial loading
- Bus speeds are slow and ridership is high
- Bike lanes are narrow and inadequate for existing volumes and future micromobility growth and uses



*Bike lane during PM peak,
2nd Ave at 23rd St*



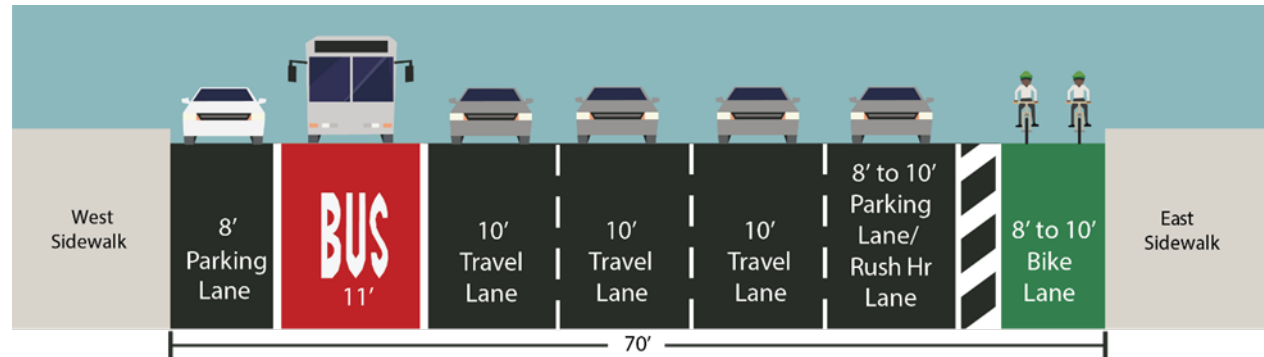
*Bus lane during AM Peak,
2nd Ave at 21st St*

Proposal

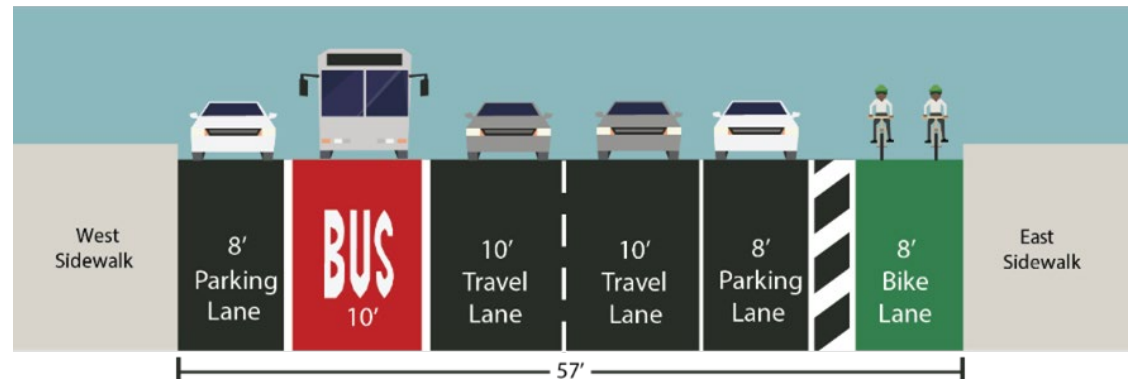
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Proposal: Offset Bus Lane and Widened Bike Lane

- Shift bus lane from the “curbside” to the “offset” lane
- Upgrade bus lane from part-time hours to full-time, improving service throughout the day
- Expand bike lane and explore new design options
- Remove rush hour lanes in key locations
- Adjust meter and curb regulations



Proposal: 2nd Ave from 59 St to 23 St



Proposal: 2nd Ave from 23 St to Houston St

Benefits of an Offset Bus Lane

An offset bus lane:

- Allows buses to use bus lane unimpeded by curbside parked or standing vehicles, reducing bus lane blockages
- Restores curb access for parking, truck loading, and passenger drop-offs/pickups
- Emergency vehicles are encouraged to use the bus lane
- Gives bus priority 24/7 to all, regardless of commuting pattern



Benefits of a Bike Lane Improvements

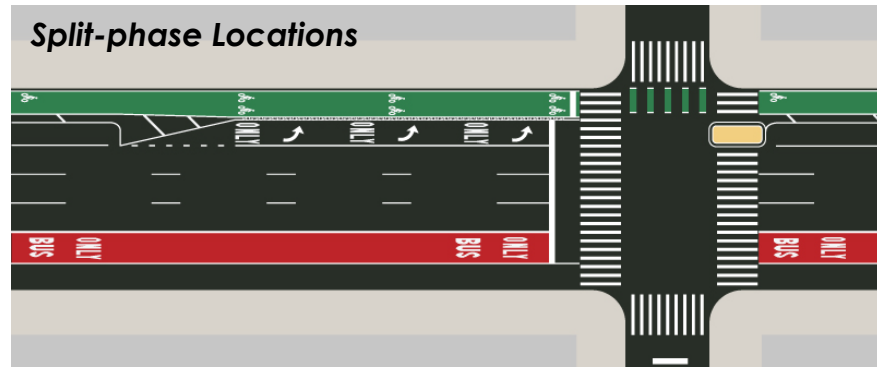
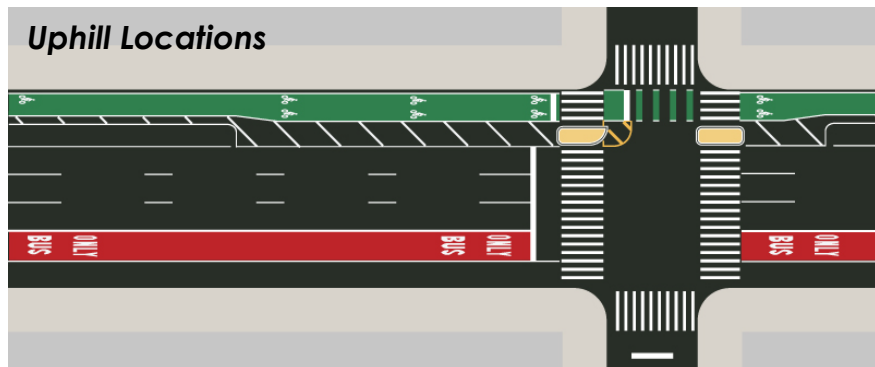
A widened bike lane:

- Increases bike lane capacity, increasing the number of cyclists who can safely use the bike lane
- Accommodates cyclists at variable speeds and abilities
- Encourages social cycling



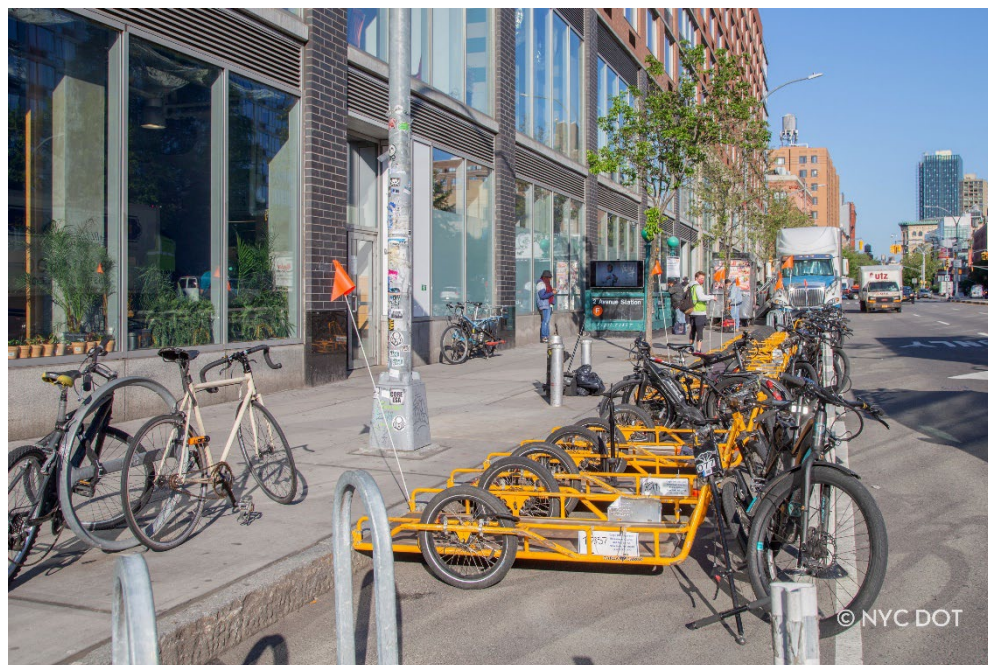
Design Options: Additional Bike Lane Widening

- Additional widening at intersections accommodates
 - Uphill locations, where users may be going multiple speeds
 - Split-phase locations, where some cyclists may be turning, while others are continuing straight ahead



Design Options: Working Cyclist Areas

- Rest stops areas for delivery workers
- Cargo bike loading zones
- Bike parking



Design Options: Pedestrian Upgrades

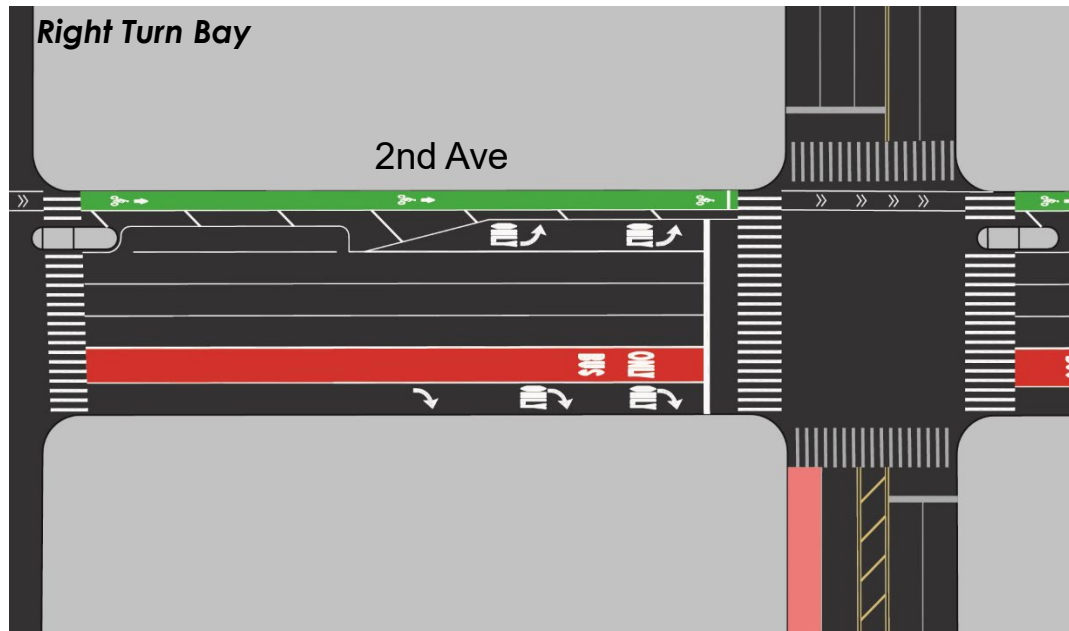
- Convert existing painted pedestrian islands to concrete for enhanced safety
- Create painted pedestrian islands on the east curb, next to the bike lane, and add curb extensions on west curb to shorten crossing distances



Design Options: Right Turn Bays

At intersections with heavy right turn volumes

- Add southbound right-turn bays to keep bus lane clear
- Repurposes ~6 parking spaces per location



Summary and Next Steps

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Summary

- 2nd Ave bus lanes are often blocked, slowing down bus service
- Bike lanes do not adequately accommodate the rapid growth of cycling
- A proposed offset bus lane and widened bike lane will:
 - Improve bus speeds and reliability for thousands of daily bus riders
 - Expand west curb access for local businesses
 - Increase bike lane capacity
 - Have minimal impact on traffic flow



Next Steps

- **Spring 2024:** refine design & analyze traffic
- **Spring/Summer 2024:** implementation
- **Fall 2024:** collect data & monitor performance



Thank You!

Open Discussion & Questions



NYC DOT



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