10th Avenue Street Improvement Project

W 14th St to W 52nd St

Presented to Manhattan Community Board 4 on November 16th, 2022

NEW YORK CITY DOT

Overview

- Background
  - Cycling in numbers
  - Safety
  - Existing Bicycle Connections
- Proposal
- Summary

Background

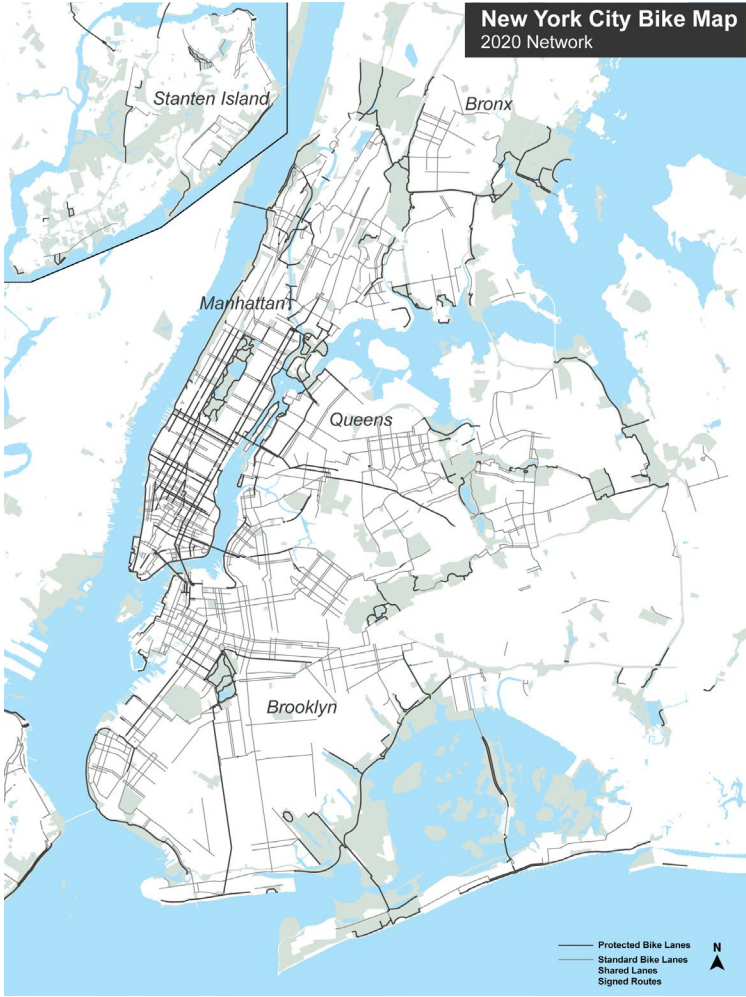
1

Cycling in Numbers

Network Map:
DOT is responsible for the largest bike network in North America with over **1,500+** lane miles

NYC Ridership:

- **880,000** New Yorkers ride a bicycle regularly (at least several times a month)
- **550,000** daily commuting bicycle trips (2021)
  - **220,000** daily trips in Manhattan (2021)
- **104%** increase in daily cycling (2011-2021)



Safety

From 2016 to 2020:

143 pedestrian were injured
68 cyclists were injured
314 motorists were injured

34 severe injuries
3 pedestrian fatalities (2016-2022)

Safety

Protected Bike Lanes

- **34% reduction in risk of injury**
- On the highest-risk streets, cycling risk or injury is reduced by over 60%

Standard Bike Lanes

- **32% reduction in risk of injury**
- Improved safety on all study projects

Shared Lanes

- **18% reduction in risk of injury** across all projects
- Limited use (wayfinding, as part of bike blvds, or on very narrow/low volume streets)

Source: Safe Streets for Cycling: How Street Design Affects Bicycle Safety and Ridership. October, 2021.

Existing Bicycle Connections

Connection with Hudson River Greenway at W 14th St

Connection with the existing northbound protected bicycle lane on 10th Ave at W 52nd St

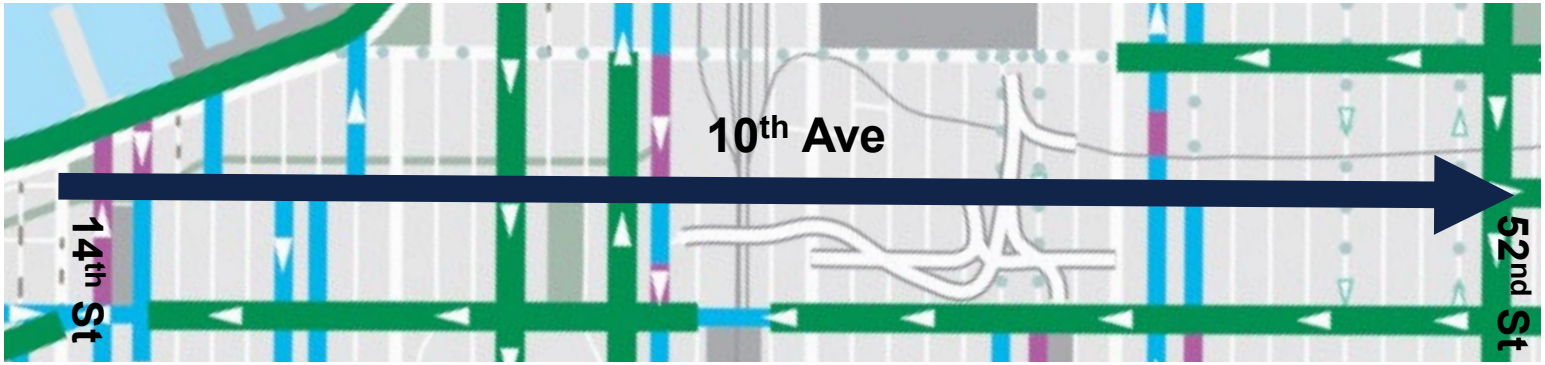
Numerous crosstown bicycle routes connect with 10th Avenue in Community Board 4

Proposal

2

Existing

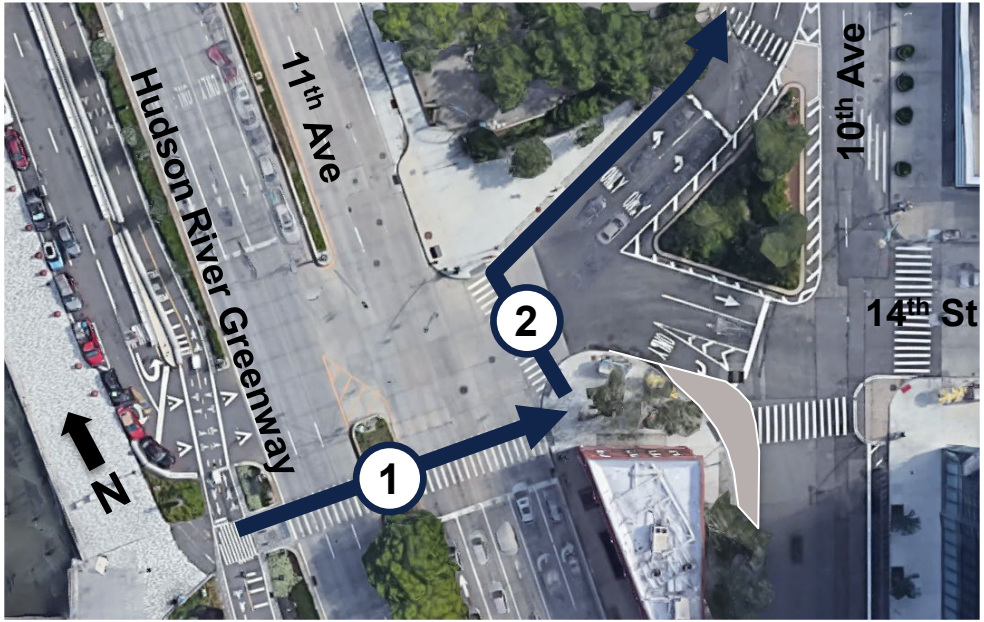
- 10th Avenue is 60’-70’ wide with four travel lanes
- Multiple entrances for the Lincoln Tunnel on the west side of the street
- Significant recent residential and commercial development on 10th Ave



Existing

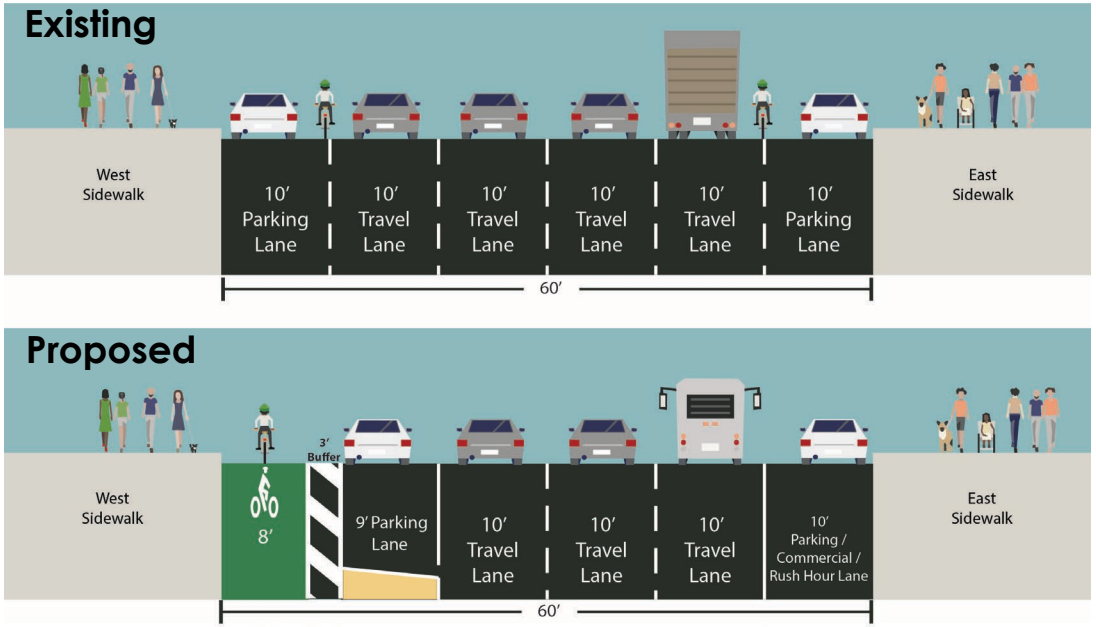
- Wide four lane roadway with no dedicated space for cyclists
- Long crossing distances for pedestrians
- Turning vehicles at tunnel entrances conflict with pedestrians

Proposed – Access from the Hudson River Greenway



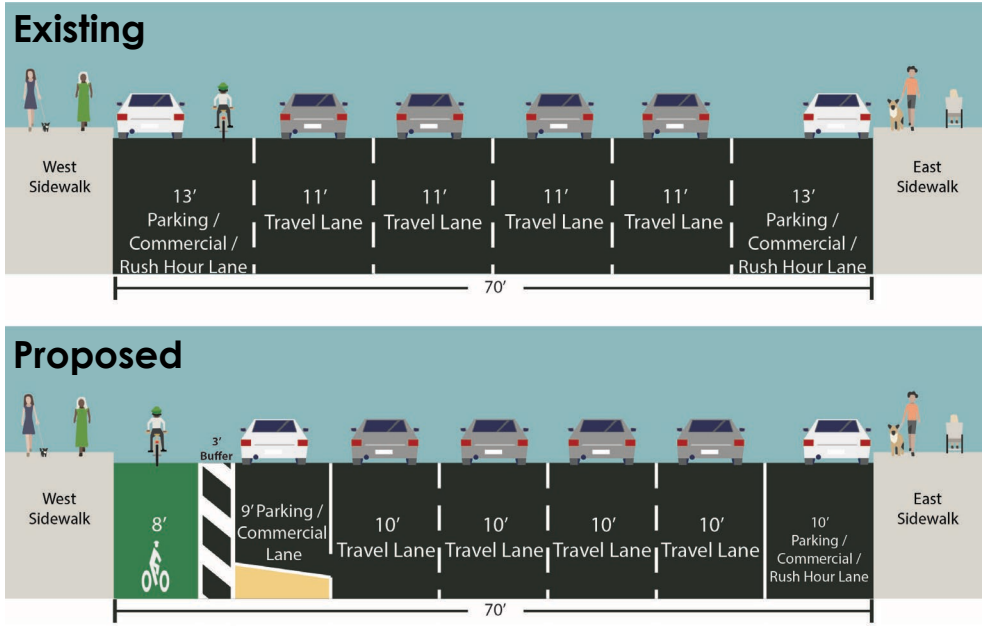
1. Cyclists on the Hudson River Greenway cross 11th Ave during pedestrian phase and wait at the SE corner of 11th Ave and 14th St
2. Cyclists cross 14th St to proceed north on 10th Ave during protected pedestrian phase

Proposed - 14th St to 23rd St



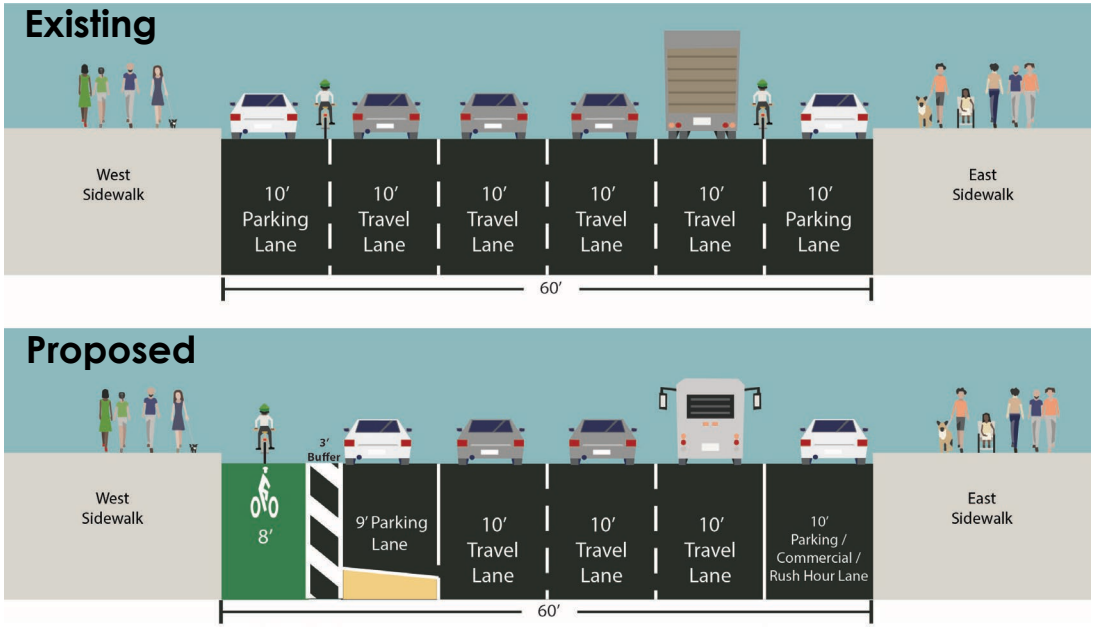
- Remove one travel lane (peak vehicle volume is 1,200-1,600 vehicles per hour)
- Install a parking protected bicycle lane with painted islands and off-set crossings
- Remove an average of three parking spaces per block to improve visibility at turn conflicts across the bike lane

Proposed - 23rd St to 42nd St



- Install a parking protected bicycle lane with painted islands and off-set crossings
- Install dedicated bike/ped signal phases at 27th, 41st, and 42nd Sts
- Remove an average of three parking spaces per block to improve visibility at turn conflicts across the bike lane

Proposed - 42nd St to 52nd St



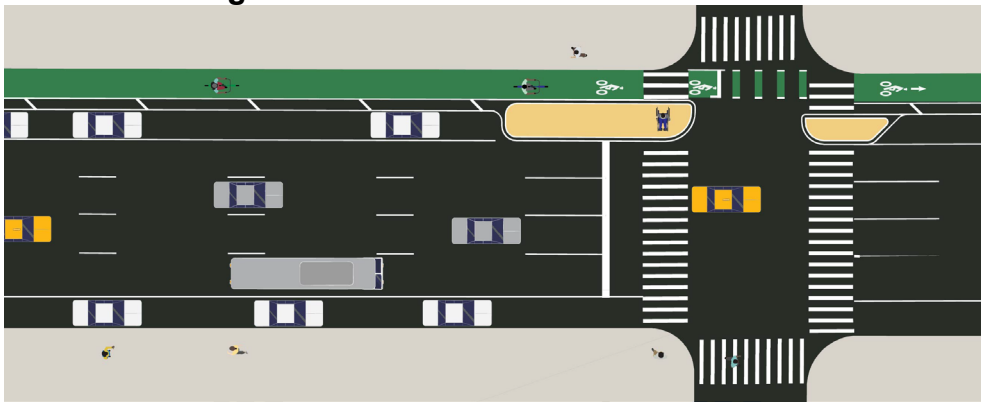
- Remove one travel lane (peak vehicle volume is 1,200-1,600 vehicles per hour)
- Install a parking protected bicycle lane with painted islands and off-set crossings
- Remove an average of three parking spaces per block to improve visibility at turn conflicts across the bike lane

Proposed: Intersection Treatment

Proposed:

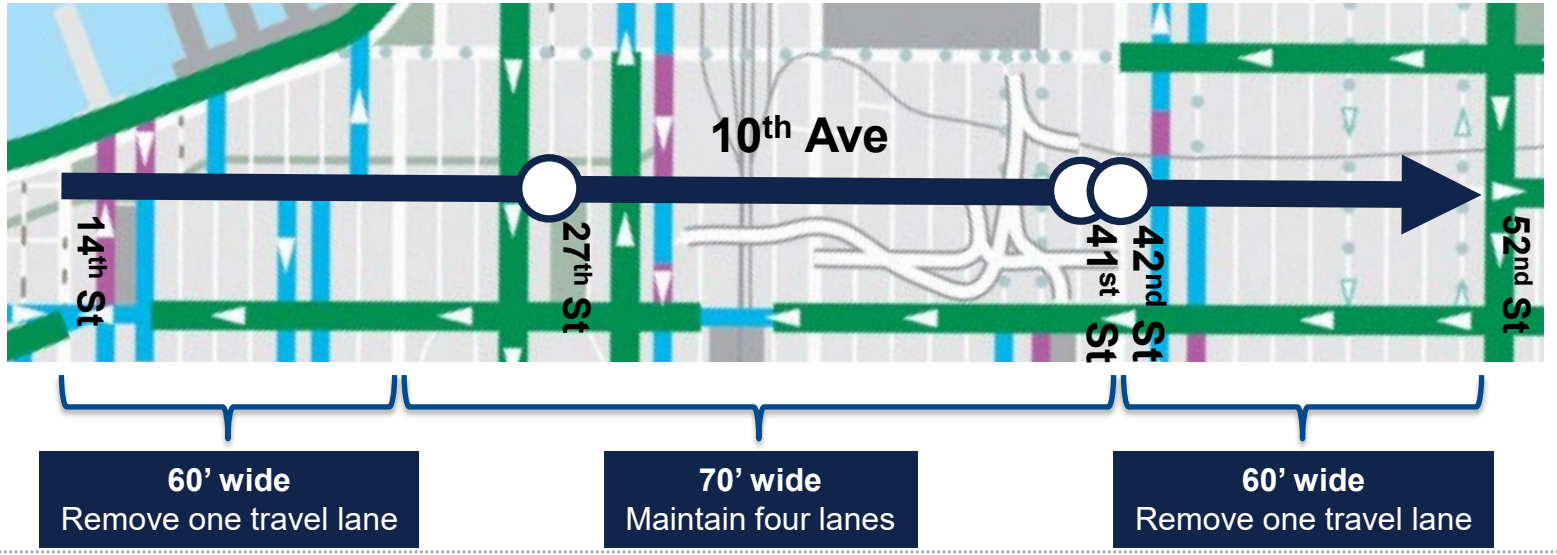
- Install Offset Crossings at intersections with lower vehicular volumes
  - Improve visibility of pedestrian and cyclists for turning vehicles
  - Reduce crossing distances, reducing pedestrian exposure
- Minimal parking impact: 2-3 spaces repurposed per block

Offset Crossing



Proposal at High Turn Volume Intersections

- Provide protected times for pedestrians to cross at intersections with high turn volumes (O)
- Install three concrete islands as part of signal installation work
- Prioritize concrete islands at high crash locations as resources allow

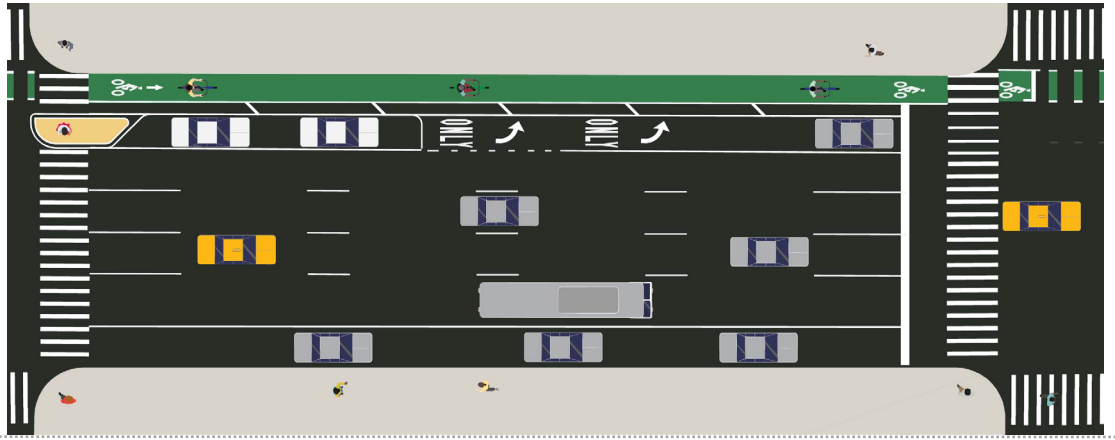


Proposed: Intersection Treatment

Proposed:

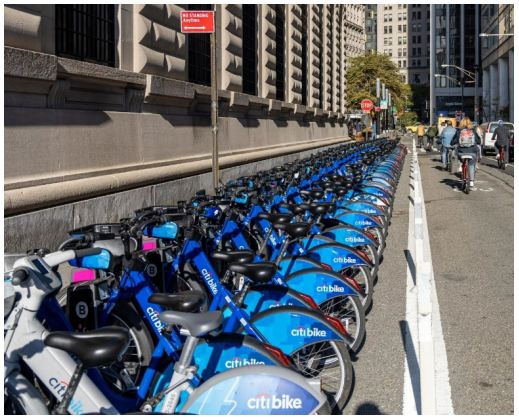
- Install Left Turn Lanes with Dedicated Signal Timing at intersections with higher volumes
  - Add protected signal phase; reduces conflicts between pedestrians & cyclists and turning vehicles
  - Reduce pedestrian exposure
- Minimal parking impact: 4-5 spaces repurposed per block

Left Turn Lane



Curbside Uses

- On the west curb existing truck loading zones will be relocated to the floating parking, changes in loading needs based on recent land use changes will be reviewed prior to installation
- Curbside Open Restaurants that conflict with the new design will be relocated to the floating parking where possible



Summary

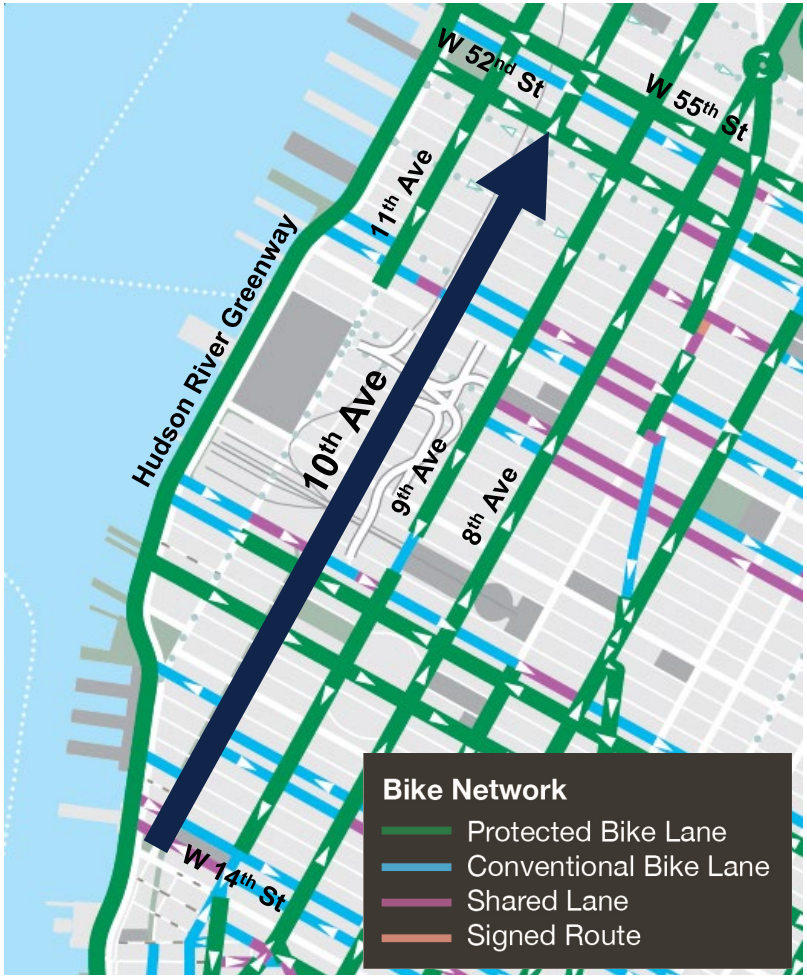
3

Summary of Benefits

Expand the protected bicycle network in midtown and Community Board 4

Provide dedicated pedestrian crossing time at tunnel entrances and high conflict intersections

Reduce pedestrian crossing distances at intersections



Thank You!

Questions?


NYCDOT


nyc_dot


nyc_dot

NYCDOT