5TH AVENUE
PROTECTED BICYCLE LANE
Manhattan Community Boards 2 & 5
March 2017
Project Background
• Bicycle lane installed on 5 Ave (Broadway to Washington Sq N) in 1978

• Southbound protected bicycle lane installed on Broadway (Columbus Circle to Union Square) 2008-2010

• Bike share launched in 2013

• 8 St Pedestrian Safety Improvements installed in 2015

• Northbound protected bicycle lanes recently installed on
  • Lafayette St/4 Ave (Prince St to Union Square)
  • 6 Ave (W 8 St to W 33 St)
Community and Elected Officials have requested 5 Ave complete street redesign

- Manhattan Community Board 2
- 2015 letter from
  - SS Hoylman,
  - AM Glick
  - AM Gottfried
  - BP Brewer
  - CM Garodnick
  - CM Johnson

Vision Zero Priority Area

Vision Zero Priority Intersection (14 St)

1 fatality, 24 severe injuries in project area (2010-2014)
Protected bicycle lane projects with 3 years of after data include the following: 9th Ave (16th-31st), 8th Ave (Bank-23rd, 23rd-34th), Broadway (59th-47th, 33rd-26th, 23rd-18th), 1st Avenue (Houston to 34th), 2nd Ave (Houston-34th), Columbus Ave (96th-77th) Note: Only sections of projects that included protected bicycle lanes were analyzed

Source: NYPD AIS/TAMS Crash Database
Proposed Enhancements
5 Ave (23 St to 14 St) – Existing Conditions

West Sidewalk

19’ Combined Parking/Travel Lane

10’ Travel Lane

10’ Travel Lane

5’ Parking Lane

8’ East Sidewalk

55’
- Install a parking-protected bike lane with painted pedestrian islands
- Install mixing-zones at 22 St, 20 St, 18 St, and 16 St
  - Parking loss: 20 spaces
- Install a split-phase signal operation at 14 St
Example of Similar Design

5th Avenue Protected Bicycle Lane
5 Ave (14 St to 9 St) – Existing Conditions

West Sidewalk

9’ Parking Lane

11’ Travel Lane

11’ Travel Lane

5’ Buffer

9’ Parking Lane

East Sidewalk

50’
- Install a parking-protected bike lane with painted pedestrian islands
- Install mixing-zones at 12 St, and 10 St
  - Parking loss: 10 spaces
5 Ave (9 St to 8 St) – Existing Conditions

- Heavy southbound left turn volume from 5 Ave to 8 St includes M1/M2/M3/M5 bus lines and tour buses; crosses the bicycle lane and eastern crosswalk
• Remove 8 parking spaces and install a curbside green bike lane along the east curb
• Protect pedestrians and bicyclists from southbound left turning vehicles with a **split-phase signal operation**
5th Avenue Protected Bicycle Lane

5 Ave at 8 St – Proposed Signal Phasing

Existing

5 Ave LPI: 7 sec
5 Ave permitted left: 47 sec
8 St phase: 36 sec

Proposed

5 Ave bike/ped: 25 sec
5 Ave protected left: 29
8 St phase: 36 sec
Summary
Project Summary

- Upgrade the existing buffered bicycle lane on 5 Ave (23 St to 8 St) to a parking-protected bicycle lane with painted pedestrian islands
- Install mixing zones at 22 St, 20 St, 18 St, 16 St, 12 St, and 10 St
- Install split-phase signal operation at 14 St, and at 8 St
- Maintain all travel lanes
- Remove 38 parking spaces (20 spaces in Community Board 5, 18 spaces in Community Board 2)

Project Benefits

- Reduces pedestrian crossing distance
- Split-phase signal operation at intersections with heavy left turns reduces conflicts between pedestrians/bicyclists and turning vehicles
- Parking-protected bicycle lane reduces bicyclists exposure to vehicular traffic
  - Works as an extension of the southbound Broadway parking-protected bicycle lane
  - Pairs with northbound 6 Ave parking-protected bicycle lane
- No reduction in vehicular capacity
THANK YOU!

Questions?