5TH AVE (61ST ST–34TH ST) BUS LANE IMPROVEMENTS

CB5 Meeting

9/25/2017
1. Introduction & Background
   1. Area Context
   2. 5th Av is Multi-Modal
   3. Importance to Bus Network
   4. Madison Avenue

2. Existing Conditions & Analysis
   1. Bus Speed & Reliability Issues
   2. Madison Av Bus Lanes are Working
   3. Traffic Dynamic on 5th v. Madison
   4. Allocating Street Space
   5. Lane Usage on 5th Avenue

3. Proposal
   1. Existing Cross Section
   2. Cross Section of plan
   3. Accommodations for Traffic & Turning Vehicles
   4. Bus Lane Hours & Signage

4. Next Steps
   1. Implementation Schedule
Introduction & Background
AREA CONTEXT

- Major commercial and retail corridor in midtown.
- Popular tourist area with heavy foot traffic during midday hours.
- Important southbound commuter corridor during AM peak, especially.
5\textsuperscript{TH} AV IS MULTI-MODAL

- 5\textsuperscript{th} Avenue travelers use a variety of modes during the AM peak, but the bus is the dominant travel mode.
- Roadway space is being predominantly allocated to taxis and private vehicles, which carry fewer people combined than buses do in the AM peak.
IMPORTANCE TO BUS NETWORK

- 39 different bus routes coming from all 5 boros use this portion of 5th Av.
  - 9 Brooklyn Routes
  - 9 Bronx Routes
  - 6 Manhattan Routes
  - 4 Queens Routes
  - 11 Staten Island Routes

- 50-130 buses per hour throughout the day
- ~75,000 daily bus passengers
- Bus delays on midtown 5th Av can impact reliability city-wide
MADISON AV

- Double bus lane implemented in 1983
- Bus lane active hours expanded from 2 – 7 PM to 24 Hours in Nov. 2012.
- Many local and express buses that go north on Madison Av, go south on 5th Av.
- Street width and traffic volumes are similar to 5th Av, which suggests a similar design on 5th Av could work.
Existing Conditions & Analysis
BUS SPEED & RELIABILITY ISSUES

- Local bus speeds: 4 - 6 MPH
- Express bus speeds: 5 - 8 MPH
- >80% of existing usable curb space in the bus lane on the west side of 5th Av is already bus stops.
  - The existing bus lane can’t be used efficiently for bus through travel.
MADISON AV BUS LANES ARE WORKING

- Nov. 2012 Madison Avenue double bus lane hours change improved speeds and reliability for AM buses.
- Bus travel times have become shorter and more consistent, especially during the most congested periods.
TRAFFIC DYNAMIC ON 5TH VS. MADISON

5th Avenue

- General traffic: 10 MPH
- Buses: 5.7 MPH
- Buses traveling at 57% of general traffic speed during daytime hours

Madison Avenue

- General traffic: 10 MPH
- Buses: 7.1 MPH
- Buses traveling at 71% of general traffic speed during daytime hours.
- Double bus lane contributes to greater relative speed and reliability for buses
ALLOCATING STREET SPACE

Southbound on 5th Av in AM

- Buses: 12’
- Travel Lane: 10’
- Travel Lane: 11’
- Travel Lane: 11’
- Travel Lane: 11’

55’

Street Space: 78%
People*: 46%

1,950

Northbound on Madison Av in PM

- Travel Lane: 10’
- Travel Lane: 10’
- Travel Lane: 11’
- Travel Lane: 11’
- Travel Lane: 11’

54’

Street Space: 59%
People*: 41%

1,567

People*: 41%

2,700

* in vehicles
LANE USAGE ON 5TH AVENUE

Southbound Through Vehicle Split

- Only 11% of private vehicles & taxis use lane 2 for through travel on 5th Avenue today.
- Lane 2 used by 73% of through-running buses
Proposal
EXISTING CROSS-SECTION

- Curbside bus lane used by buses at stops
- Buses getting around stopped buses
- Through traffic, pick-ups & drop-offs

2-3 lanes available for traffic

Travel Lane: 10’
Travel Lane: 11’
Travel Lane: 11’
Travel Lane: 11’
Travel Lane: 11’
Travel Lane: 11’

55’
PROPOSED CROSS SECTION

Double bus lane accommodates bus stops, through buses, & right turns

2-3 lanes available for traffic

Through traffic, pick-ups & drop-offs
ACCOMMODATIONS FOR TRAFFIC & TURNING VEHICLES

Outer lane line dashes approaching left turns in case buses need to exit

11’ curbside travel lane leaves space for left turns

Inner lane line dashes approaching right turns indicating that drivers can enter to make right turn from bus lanes
BUS LANE HOURS & SIGNAGE

24 Hour Bus Lanes on 5th Av

- Madison Av double bus lane has been 24 Hours since November 2012
- 5th Av double bus lane would be 24 Hours as well
Next Steps
IMPLEMENTATION SCHEDULE

- 9/25/2017: Community Board 5 meeting
- 10/2017: Community Board 8 briefing
- Fall 2017: Double Bus Lane Implementation
- 2018: Continued Monitoring
THANK YOU!

Questions?