PRESENTATION OVERVIEW

1. Project Background
2. Existing Conditions & Analysis
3. Proposal
4. Summary / Next Steps
Project Background
BETTER BUSES ACTION PLAN

- Mayor’s 2019 State of the City
  - Improve bus speeds 25% by 2020
- Better Buses Action Plan released April 2019
  - 24 priority projects announced for 2019 to increase bus speeds across all 5 boroughs
AREA BUS SPEEDS IN CONTEXT

AM/PM Peak Hour Bus Speed Averages

• Citywide: 7.7 MPH
• Manhattan: 5.6 MPH
• 42nd Street: 4.0 MPH
IMPORTANCE TO BUS NETWORK

- 8 different MTA bus routes across 3 boroughs use 42nd St
  - M42 Manhattan Route
  - X68 Queens Route
  - 6 Staten Island Express Bus Routes
- ~16,000 daily MTA bus passengers
- Up to 210 buses per hour travel along 42nd Street
- Bus delays on 42nd St can impact reliability city-wide
42nd Street is multi-modal

63% Pedestrian
6% Car
2% Taxi
<1% Truck
29% Bus
<1% Bicycle

PM Peak Hour Screen-line on 42nd Street @ 8th Ave*

- 42nd Street travelers use a variety of modes, with nearly one-third traveling by bus during the PM peak

*Source: Feb 2019 traffic & sidewalk screen-line counts. Occupancy factors: 30 persons/bus, 1.3 persons/other vehicles
Buses operate on the margins of 42nd St, but carry the majority of the people.

Bus lanes in effect 7-10 AM, 4-7 PM except Sunday
Existing Conditions & Analysis
## BUS TRAVEL TIMES

### M42 Running Time (Min, end to end)

<table>
<thead>
<tr>
<th>Direction</th>
<th>Day</th>
<th>Time of Day</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>12-6am</td>
<td>6-10am</td>
<td>10am-3pm</td>
<td>3-7pm</td>
<td>7pm-12am</td>
</tr>
<tr>
<td>EB</td>
<td>Weekday</td>
<td>18.8</td>
<td>33.1</td>
<td>34.4</td>
<td>29.4</td>
<td>24.3</td>
</tr>
<tr>
<td></td>
<td>Weekend</td>
<td>18.7</td>
<td>20.7</td>
<td>29.1</td>
<td>30.8</td>
<td>25.2</td>
</tr>
<tr>
<td>WB</td>
<td>Weekday</td>
<td>15.8</td>
<td>26.4</td>
<td>32.1</td>
<td>35.2</td>
<td>22.6</td>
</tr>
<tr>
<td></td>
<td>Weekend</td>
<td>16.4</td>
<td>19.1</td>
<td>27.8</td>
<td>29.3</td>
<td>23.2</td>
</tr>
</tbody>
</table>

Source: MTA NYCT

- Bus travel times are nearly double their overnight times throughout the day
- Trips are consistently long starting with the AM peak hour and through the PM peak
- On average, M42 buses spend more than 40% of their time stalled in traffic, at red lights, or crawling
BUS RELIABILITY ISSUES

• Bus running time is unreliable even within the same time period due to varying traffic conditions day to day

• Runs can vary by 20-40 minutes, leading to bus bunching, long/unpredictable waits at the bus stop, and crowding on the bus

Source: MTA NYCT
CURB ACTIVITY

- Fieldwork and video analysis
  - Bus lanes are underused due to very narrow width (9’) and blockages by other vehicles
  - Quick pick-up/drop-off activity common along corridor
  - Commercial loading activity is high and durations are short (<1 hr)
  - Turns off 42 St street are difficult due to pedestrian volumes, causing congestion
Proposal
TRANSIT STREET DESIGN TOOLKIT

- Bus lanes
- Bus queue jump signals
- Physical separation
- Turn restrictions
- Curb regulations
- Bus boarders
PROPOSED CROSS SECTION
(MIDBLOCK & INTERSECTIONS WITH NO TURNS)

- Curbside bus lane
- Thru travel lanes
- Offset bus lane
- Commercial Metered Parking/Loading

12’ Bus
11’ Travel Lane
11’ Travel Lane
11’ Bus
9’ Parking / Loading

55’

Investigating physical protection in certain segments where feasible
PROPOSED CROSS SECTION
(AT INTERSECTION WITH PERMITTED TURNS)

Within CB5: 8th Ave EB, Broadway WB

Within CB5: 6th Ave WB
BUS LANE HOURS & CURB REGULATIONS

- Offset bus lanes (lanes not against the curb) in effect 24/7
- Curbside bus lanes in effect 7 AM – 7 PM all days, except at bus stops or other existing No Standing Anytime
  - 7 PM – 7 AM hours allocated to metered commercial/truck loading
- Other curb space allocated to metered commercial/truck loading, hotel loading zones, authorized parking
PROPOSED DESIGN 8TH AVE – 7TH AVE

Wide curbside bus lane 7A-7P (allows for passenger pickup/drop-off + buses to pass)
1 hr comm’l metered parking 7P-12A, truck loading 12A-7A

No turns onto 7th Ave

Painted curb extension

Move EB bus stop closer to intersection

EB left turn split-phase signal (under inv.)

Wide curbside bus lane 7A-7P (allows for passenger pickup/drop-off + buses to pass)
1 hr comm’l metered parking 7P-12A, truck loading 12A-7A
PROPOSED DESIGN 7TH AVE – 6TH AVE

Curbside bus lane 7A-7P
1 hr comm'l metered parking 7A-12A, truck loading 12A-7A

1 hr comm'l metered parking 7P-12A, truck loading 12A-7A

Bus stop with bus boarder

Curbside bus lane 24/7 (existing No Standing Anytime)

Curbside bus lane 7A-7P
1 hr comm'l metered parking 7A-12A, truck loading 12A-7A

No left turns onto 6th Ave 24/7 (existing 7A-7P restriction)
PROPOSED DESIGN 6TH AVE – 5TH AVE

- Right turn bay for turns onto 6th Ave
- 1 hr comm’l metered parking 7A-12A, truck loading 12A-7A
- Bus stop with bus boarder
- Curbside bus lane 7A-7P
- Painted curb extension
- 1 hr comm’l metered parking 7P-12A, truck loading 12A-7A
**5th Ave – Madison Ave**

- Bus only left turn lanes
- Curbside bus lane: No Standing Anytime
- Curbside bus lane 7A-7P
- 1 hr comm’l metered parking 7P-12A, truck loading 12A-7A
MADISON AVE – LEXINGTON AVE

- Painted curb extensions
- Bus stop with bus boarder
- Hotel Loading Zone (paired with existing LPI)
- Bus signal queue jumps

Curbside bus lane 24/7
(Existing No Standing Anytime)

Curbside bus lane 7A-7P
1 hr comm’l metered parking 7P-12A, truck loading 12A-7A

No left turn 24/7
(existing 7A-7P)
Ex Buses

No right turn 7A-7P
(existing 7A-10A, 4P-7P)
Ex Buses
## CHANGES TO TURN RESTRICTIONS

<table>
<thead>
<tr>
<th>Location</th>
<th>Turn Direction</th>
<th>Current Regulation</th>
<th>New Regulation</th>
<th>Max. Impacted Hrly Turning Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 Av</td>
<td>Right turn EB to SB</td>
<td>Permitted All Times for All Vehicles</td>
<td>Restricted All Times for All Vehicles</td>
<td>135 (Midday Peak)</td>
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<tr>
<td></td>
<td>Left turn WB to SB</td>
<td>Restricted All Times Except Buses</td>
<td>Restricted All Times for All Vehicles</td>
<td>3 buses (Midday &amp; PM Peaks)</td>
</tr>
<tr>
<td>6 Av</td>
<td>Left turn EB to NB</td>
<td>No Turns 7am-7pm Except Sunday</td>
<td>Restricted All Times for All Vehicles</td>
<td>125 (Weekend Peak)</td>
</tr>
<tr>
<td>Lexington Av</td>
<td>Left turn WB to SB</td>
<td>No Turns 7am-7pm Except Sunday</td>
<td>Restricted All Times Except Buses</td>
<td>50 (Weekend Peak)</td>
</tr>
<tr>
<td></td>
<td>Right turn EB to SB</td>
<td>No Turns 7-10am, 4-7pm Mon-Fri Except Buses</td>
<td>No Turns 7am-7pm Except Buses</td>
<td>115 (Midday Peak)</td>
</tr>
</tbody>
</table>
BUS STOP CHANGES

• Park Ave – 3rd Ave: 3 stops within 2 short blocks in each direction
• Consolidate Lex Ave and 3rd Ave stops to single stop in each direction to improve stop spacing, more closely matching standard spacing along rest of 42nd
Summary / Next Steps
SUMMARY

• Current design of 42\textsuperscript{nd} St does not meet the demands of most street users
• Street design changes will
  • Improve bus speeds and reliability
  • Make commercial metered parking/loading space available throughout the day and overnight to reduce illegal standing and daytime congestion
  • Improve turns off of 42\textsuperscript{nd} Street at key intersections
  • Restrict some turns to improve safety and traffic flow
IMPLEMENTATION SCHEDULE

- **June 2019**: Corridor design presentation to Community Boards 4, 5, & 6
- **Summer 2019**: Adjustments to plan as needed, street design implementation
- **Fall 2019**: Post-implementation data collection & monitoring
THANK YOU!

Questions?