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
BETTER BUSES ACTION PLAN

• 42\textsuperscript{nd} St identified as priority 2019 project due to:
  • Slow bus speeds & unreliable bus travel times
  • High ridership & high volume of buses
  • Major crosstown multimodal corridor
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 CORRIDOR

- Major commercial corridor in midtown
- Important east-west commuter corridor with major transit hubs (PABT, Times Sq, Grand Central)
- Popular tourist area with heavy foot traffic
42\textsuperscript{nd} ST IS MULTI-MODAL

PM Peak Hour Screen-line on 42\textsuperscript{nd} Street @ 8\textsuperscript{th} Ave*

- 42\textsuperscript{nd} 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.
CROSSTOWN TRANSIT CORRIDORS

NYCDOT has retrofitted several crosstown corridors to meet modern street design standards & transit needs:

- 86 St
- 79 St
- 34 St
- 23 St

Street width and traffic volumes are similar to 34th St or 23rd St, which suggests a similar design on 42nd St would be appropriate.
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>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12-6am</td>
<td>6-10am</td>
</tr>
<tr>
<td>EB</td>
<td>Weekday</td>
<td>18.8</td>
</tr>
<tr>
<td></td>
<td>Weekend</td>
<td>18.7</td>
</tr>
<tr>
<td>WB</td>
<td>Weekday</td>
<td>15.8</td>
</tr>
<tr>
<td></td>
<td>Weekend</td>
<td>16.4</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
- Summary of findings:
  - Bus lanes are underused due to very narrow width (9’) and occasional blockages by other vehicles
  - Quick pick-up/drop-off activity common along corridor
  - Commercial loading activity is high and durations are short (<1 hr)
Proposal
TRANSIT STREET DESIGN TOOLKIT

Bus lanes

Bus queue jump signals

Physical separation

Turn restrictions

Curb regulations

Bus boarders
EXISTING CONDITIONS

- Existing roadway conditions do not meet current DOT standards for lane widths. Typical lane widths are 10’-11’ for general travel lanes and 11’-12’ for bus lanes.
- 42 St is marked for 2 travel lanes with 1 curbside bus lane in each direction (in effect 7-10 AM, 4-7 PM except Sunday). However, it rarely functions that way due to loading needs and traffic conditions.
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 TURNS)

Turn lanes provided where needed.
PROPOSED DESIGN SAMPLE BLOCK

- Hotel loading zone
- Extended No Left Turn onto Lexington Ave (all vehicles, all times)
- Offset bus lane
- Commercial metered parking
- Right turn bay for turns onto 3rd Ave
- Curbside bus lane
- Left turn bay for turns onto Third Ave
## PROPOSED TURN RESTRICTIONS

<table>
<thead>
<tr>
<th>Location</th>
<th>Turn Direction</th>
<th>Current Regulation</th>
<th>New Regulation</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>
</tr>
<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>
</tr>
<tr>
<td>6 Av</td>
<td>Left turn EB to NB</td>
<td>No Turns 7am-7pm Ex Sunday</td>
<td>Restricted All Times for All Vehicles</td>
</tr>
<tr>
<td></td>
<td>Left turn WB to SB</td>
<td>No Turns 7am-7pm Ex Sunday</td>
<td>Restricted All Times for All Vehicles</td>
</tr>
<tr>
<td>Lexington Av</td>
<td>Right turn EB to SB</td>
<td>No Turns Ex Buses 7-10am, 4-7pm Mon-Fri</td>
<td>No Turns 7am-7pm for All Vehicles</td>
</tr>
</tbody>
</table>
PLANNED 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
PROPOSED BUS LANE HOURS & CURB REGULATIONS

• Offset bus lanes (lanes not against the curb) will be in effect 24/7
• Curbside bus lanes will be 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 BUS LANE HOURS & CURB REGULATIONS

Existing

- 7 AM-10 AM, 4 PM-7 PM: Curbside bus lane
- 10 AM-4 PM: Commercial metered parking/truck loading
- 7 PM-12 AM: Metered parking

Proposed

- 7 AM-7 PM: Curbside bus lane
- 7 PM - 7 AM: Commercial metered parking/truck loading
- All hours: Offset bus lane
- All hours: Commercial Metered Parking/Loading
Summary / Next Steps
SUMMARY

• Current design of 42nd 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 42nd 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?