Tunnel Reconstruction
Manhattan CB5
August 20, 2018
Reconstructing the \( L \) Tunnel

- Repairing 7,110 ft. of concrete lining
- Installing new tunnel lighting system
- Replacing pumping equipment
- Rebuilding two circuit breaker houses
- Building a substation

- Repairing fire protection system
- Replacing Cable:
  - Communication 176,000 ft.
  - Power 126,000 ft.

- Installing 14,400 ft. of new tracks and 15,800 ft. of third rail

- Reconstructing 30,126 ft. of concrete duct bank
Service During Tunnel Reconstruction
April 2019 through July 2020

No service between 8 Av and Bedford Av

Bedford Av

service operates between Bedford Av and Rockaway Pkwy

L service during tunnel closure

Canarsie Rockaway Pkwy

MTA NEW YORK CITY DOT
Projected Cross River Travel Paths of Customers

The Service Plan:
Our modeling assumes 100% of trips will be accommodated by one of the following service options.
Projected Cross River Travel Paths of L Customers

By Subway:
More J M Z service

- 32% of L customers
- 14% capacity increase, accommodating an additional 3,480 riders
By Subway:

More service and longer trains to/from Long Island City
- 28% of customers
- 176% capacity increase, accommodating an additional 11,100 riders

More service and longer trains to/from Downtown Brooklyn
- 7% of customers
- 121% capacity increase, accommodating an additional 7,620 riders
Projected Cross River Travel Paths of L Customers

By Subway:

From the G in Queens:
- Additional E M service
  - 11% of L customers
  - 11% capacity increase, accommodating an additional 3,480 riders
- Additional 7 service
  - 15% of L customers
  - 7% capacity increase, accommodating an additional 2,420 riders
Projected Cross River Travel Paths of L Customers

By Subway:

- 12% will transfer from the A and C trains in Brooklyn (longer C trains)
- 7% capacity increase, accommodating 2,320 customers
Projected Cross River Travel Paths of L Customers

By Subway:
3% of riders will take the 2 3 4 5
Projected Cross River Travel Paths of Customers

By Bus and Ferry:
Four interborough Select Bus Service Routes
• 17% of customers
• 80 buses per hour, accommodating 4,200 riders

New ferry service
• 4% of customers
• Eight ferries per hour, accommodating 1,190 riders
In Summary:

- 79% of L riders will take other subway lines
- 17% of L riders will take interborough buses
- 4% of L riders will take the ferry
- 71% of L riders will have no more than 10 minutes additional travel time in AM peak
Permanent Station Improvements

Prior to the tunnel closure, we are improving access to and capacity in stations along the G, J, M and Z lines, that will provide alternatives to L service. During the tunnel closure, we will also enhance stations along the L line.
Interborough Select Bus Service

80 Buses Per AM Peak Hour will Travel Across the Williamsburg Bridge

- L1 SBS
- L2 SBS
- L3 SBS
- L4 SBS
Interborough Select Bus Service: L1 SBS

Service between Grand St and 1 Ave/15 St:

- Every 2½ minutes during AM peak hours
- Every 3½ minutes during PM peak hours
Interborough Select Bus Service: L2 SBS

Service between Grand St and SoHo:

- Every 2½ minutes during AM peak hours
- Every 3½ minutes during PM peak hours
Service between Bedford Av and SoHo:

- Every 2½ minutes during AM and PM peak hours
Interborough Select Bus Service: L4 SBS

Service between Bedford Av and 1 Ave/15 St:
- Every 6 minutes during AM peak hours
- Every 6½ minutes during PM peak hours
Weekend Service: L2 SBS, L3 SBS, L4 SBS
Late Night Bus Service: L14 SBS
Bus Priority Plan

14th Street Busway
Buses and Local Access Only
Eastbound: Ninth Av to Third Av
Westbound: Third Av to Eighth Av
5 AM to 10 PM, every day

Proposed
- Williamsburg Bridge
  - Buses, Trucks & HOV 3+ Only
- Busway
  - Buses & Local Access Only
- Bus Priority
  - SBS Route & Stop
  - Shuttle Route & Stop

Existing
- Bus Lane

Williamsburg Bridge
Buses, Trucks & HOV 3+ Only
Manhattan-Bound & Brooklyn-Bound
5 AM to 10 PM, every day
Williamsburg Bridge HOV 3+ Hours

HOV 3+ Policy:
5 AM to 10 PM, every day
• Buses, Trucks & HOV 3+ Only
• Manhattan- and Brooklyn-Bound
• All Lanes

Key benefits
• 5 AM start discourages early morning congestion before regulation goes into effect
• HOV supports period of highest projected bus ridership demand
• Weekend and evening HOV hours support non-commute trips

DOT coordinating with NYPD on enforcement staging, strategy
14th Street Transit Corridor
14th Street Busway Hours

5 AM to 10 PM, every day
- Buses
- Emergency Vehicles
- Local access for deliveries, private parking garages, pickups and drop-offs

- Busway hours support period of highest traffic demand on 14th Street
- Bus lane camera enforcement and NYPD presence will deter through traffic
- Busway operation without a midday gap allows for clear messaging and enforcement
- DOT will monitor traffic conditions on 14th Street and wider traffic network throughout the closure period
14th Street Busway Design

Existing

Proposed (at stops)

10' Temporary Bus Bulb
10' Bus Stop
11' Bus & Local Delivery Travel Lane
11' Bus & Local Delivery Travel Lane
10' Temporary Pedestrian Area

Proposed (midblock)

7' Temporary Pedestrian Space
8' Loading Space/Pick-up & Drop-off
11' Bus & Local Access Travel Lane
11' Bus & Local Access Travel Lane
8' Loading Space/Pick-up & Drop-off
7' Temporary Pedestrian Space
Busway between 5th and 6th Avenue

- Shorter Ped Crossing
- Commercial Loading & Local Access
- Bus Boarder
- Pedestrian Area
- Bus Passing Lane
- M14 Local
- M14SBS/Local

Busway between 5th and 6th Avenue
Local Access within the 14th Street Busway

- Response to public and elected official feedback
- Local Access:
  - Turn right on to 14th Street
  - Exit at next right turn
- Left turns prohibited at most intersections
- Enforceable with bus lane cameras

- Most pickup/dropoff activity currently takes place on the avenues, not on 14th Street
- DOT will conduct outreach local businesses and residents about access policy
M14 SBS Bus Stops – 10th Ave & Stuyvesant Cove
M14 SBS – January 2019

- Seven days a week
- 6 am – 10 pm
- Every 8 minutes
M14 SBS and M14A/M14D Bus Stop Locations
Bus Stops at Union Square

Temporary M14A/D stop removal to allow for needed pedestrian space

M14A/D stops relocated to improved stop location, allowing for more pedestrian space where sidewalks are most congested
Pedestrian Volume Increases

Pedestrian surges of over 2x existing volumes on a Vision Zero Priority Corridor

### 14th Street Projected Pedestrian Volume Changes

#### 8-9 AM Peak Hour

<table>
<thead>
<tr>
<th>Location</th>
<th>Existing Volume</th>
<th>New Volume</th>
<th>% changes</th>
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</thead>
<tbody>
<tr>
<td>Union Sq</td>
<td>7,500</td>
<td>11,500</td>
<td>53%</td>
</tr>
<tr>
<td>(4 Av, Union Square East, Broadway, University Pl, Union Square West)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Av</td>
<td>3,100</td>
<td>7,400</td>
<td>139%</td>
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<tr>
<td>8 Av</td>
<td>1,700</td>
<td>3,000</td>
<td>76%</td>
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</tbody>
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### W 14th Street at Sixth Avenue

### W 34th Street at Sixth Avenue

Data Inputs: counts of current pedestrians, projected bus volumes, projected entrance and exit of subway stations by stairway
UNION SQUARE WEST

- Reduce Pedestrian Congestion at 17th St.
- strengthen SB bike connection

- Maintain circulation for Deliveries, Pick-up/ drop-off, Farmers Market trucks

- Improve Ped Circulation
- Strengthen SB bike connection

Green Market Realignment
New Curb Regulations
Minor Cobble Work

Additional 19,000 Sf of Public Space

EXPANDED PUBLIC SPACE

‘SERVICE LOOP’

EXPANDED PUBLIC SPACE
Initiating Proposed Ferry Service

Ferry Will Operate 6 AM to Midnight on Weekdays, and 6 AM to 2 AM on Weekends

Between Brooklyn and Manhattan:

- Every 7½ minutes during AM and PM peak hours
- Every 10 minutes middays, evenings and weekends
2,000 – 3,500 cyclists projected to cross the Williamsburg Bridge during AM rush hour (8A-9A)
**Existing Condition:** Wide travel lane
Blocks range from 29’-34’ wide

**Proposed Configuration:** Curbside bike lane on left side (south side of 13th St, north side of 12th St)

**Design Details**
- Bike lane separated with flexible delineators and demarcated buffer
- Floating pickup & drop-off adjacent to bike lane may be feasible at some locations
- Parking spaces to be removed along
  - North side of 12th St (7th Ave – Ave C)
  - South side of 13th St (Greenwich Ave – Ave B)
Citi Bike Infill

Increasing docks and bikes in the existing service area

- 1,250 bikes, 2,500 docks
  - Manhattan: 59th Street – Canal
  - Brooklyn: Williamsburg area

- Expanded Valet Services
  - Staffed by Citi Bike, Valet Service allows Stations to operate at increased capacity

- Pedal-assist Shuttle Service
  - 1,000 pedal assist bikes
  - Available at key locations
    - 2 in Manhattan
    - 2 in Brooklyn

- Additional standard bike parking in key locations
Weekend Preparatory Work on L Line

- Ensure reliable service for riders during reconstruction
- Ensure project duration stays within 15 months
- No service between Manhattan and either Myrtle-Wyckoff Avs or Broadway Junction
- Late night service diversions are also required

<table>
<thead>
<tr>
<th>Summer and Fall 2018</th>
<th>Winter and Spring 2019</th>
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</thead>
<tbody>
<tr>
<td>August 11-12</td>
<td>February 2-3</td>
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<tr>
<td>October 6-7</td>
<td>February 9-10</td>
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<tr>
<td>October 13-14</td>
<td>February 16-17</td>
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<td>October 20-21</td>
<td>February 23-24</td>
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<td>October 27-28</td>
<td>March 2-3</td>
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<tr>
<td>November 10-11</td>
<td>March 9-10</td>
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<tr>
<td>November 17-18</td>
<td>March 16-17</td>
</tr>
<tr>
<td></td>
<td>April 13-14</td>
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</tbody>
</table>
Customer Service and Communications

Remaining Responsive:

• Hundreds of MTA staff will be deployed at subway stations, bus stops and ferry locations to manage crowding to ensure safety

• Actively communicate with customers in real time, in person and through all available channels

• MTA to work with DOT and other relevant City agencies to ensure responsive information dissemination and feedback

• Will make adjustments to the plan in response to feedback
Proposed Alternate Subway, Bus and Ferry Services