Webster Avenue Select Bus Service
Community Advisory Committee Meeting #4 | November 29, 2012 | 3:00 pm
Agenda

- Project background
- Corridor design
- Traffic analysis
  - 5 minute Q&A break
- Bus service planning
  - 5 minute Q&A break
- Next steps
- Q&A / Small group discussions
SBS Corridors

June 2008 Fordham Rd (Bx12)
Oct 2010 1st/2nd Ave (M15)
Nov 2011 34th St (M34/34A)
Sept 2012 Hylan Blvd (S79)
2013 Nostrand Ave (B44)
2013/14 Webster Ave (Bx41)
2013/14 LaGuardia Airport (M60)
SBS Results

**Speed:** 15-20% faster

**Ridership:** 5-10% increase in first year

**Customer Satisfaction:** over 95% satisfied or very satisfied

**Safety:** 1st and 2nd Avenues saw a 21% reduction in traffic injuries in sections with full design treatments

Bx12  M15  M34/34A
The Webster Avenue corridor

- Based on the existing Bx41 route that carries over 22,000 daily riders
- 5.3 miles from The Hub to Williamsbridge
- Within a 10-minute walk of the corridor:
  - 200,000 residents
  - 71% of households do not own a car
  - 61% of residents commute by transit
Project goals

1. Speed buses and improve reliability

2. Improve safety for all corridor users

3. Support community needs
## CAC meetings recap

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<th>Meeting #1</th>
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<th>Meeting #3</th>
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<td>February 6, 2012</td>
<td>May 2, 2012</td>
<td>September 27, 2012</td>
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<td>- Project introduction</td>
<td>- Corridor data analysis</td>
<td>- Introduction to corridor offset bus lane design</td>
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<td>- Identification of issues and opportunities along the corridor</td>
<td>- Three corridor design ideas</td>
<td>- Design ideas for specific areas along the corridor</td>
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SBS Overview

- Bx41 LTD → Bx41 SBS
- 4 miles of offset bus lanes with bus bulb stations
- For the entire route:
  - Low-floor buses
  - Off board fare collection
  - Station and bus branding
  - Transit signal priority
  - Pedestrian safety improvements
Existing conditions

Webster Avenue / E 167th Street
Proposed design

Webster Avenue / E 167th Street
Proposed design

- Pedestrian neckdowns
- SBS Station / Bus Bulb
- Pedestrian refuge islands and greening
- Offset bus lanes
- Transit Signal Priority

Webster Avenue / E 167th Street
Benefits of proposed design

1. Offset bus lanes improve bus speed
2. Bus bulbs allow for high-quality SBS stations
3. Maintains curbside access and parking
Benefits of proposed design

4. Curb extensions and medians improve pedestrian safety

5. Addresses speeding and vehicle safety issues

6. Maintains appropriate traffic flows and circulation
SBS Bus Stations - Bus Bulbs

Example: M15 SBS, 1st Ave/1st St Station
SBS Bus Stations - Curbside

Example: Bx12 SBS, Fordham Rd / Webster Av Station
Pedestrian safety elements

Neckdown / curb extension

Pedestrian refuge / Median
Traffic analysis process

- Studied 10 intersections along the section of the corridor with proposed bus lanes
- AM and PM Peak
- Focus on the busiest intersections along the corridor
Traffic analysis process

- Intersection design and signal timing determine the capacity of the street

- Analysis inputs:
  - Traffic volumes
  - Traffic signal timing and progression
  - Number of lanes
  - Curb activity

- Analysis Output:
  - Average delay per vehicle
  - “Level of Service” (LOS) grade (A thru F)
Vehicle delay / Level of Service

**Webster Av / E 204 St**
- Light traffic
- Cars clear intersection quickly

**Webster Av / Claremont Pkwy**
- Moderate traffic
- Typical amount of delay for NYC

**Webster Av / E Fordham Rd**
- Heavy traffic
- Cars may wait more than one green light to clear intersection
Existing Traffic Conditions

- Overall, corridor moves very well
- Congestion at selected intersections
  - E Fordham Rd
  - E Gun Hill Rd
  - Cross Bronx Expressway
Webster Ave SBS traffic changes

Capacity reductions
- Replace one general travel lane with a bus lane in each direction

Capacity improvements
- **Right-turn bays** reduce blockages at busy intersections
- **Lengthening left-turn bays** creates more storage space
- **Banning left-turns** reduces conflicts and opens up additional signal time for other congested movements
- **More signal time** for key thru or left-turning movements
- **Updated curb regulations and offset bus lanes** reduce double parking
Projected Traffic Conditions

- Small changes along the majority of the corridor
- Overall traffic levels are still very good
- Improvements at major intersections
  - E Fordham Rd
  - Cross Bronx Expressway

LEGEND

Level of service - Webster Avenue
- A-B: less than 20s delay
- C-D: 20-44s delay
- D-E: 45-79s delay
- F: 80s or more delay
- Improvement: 10s+ delay decrease
- Decline: 10s+ delay increase

Project design
- SBS in Bus Lane
- SBS in Mixed Traffic
Projected Traffic Conditions

- Small changes along the majority of the corridor
- Overall traffic levels are still very good
- Improvements at major intersections
  - E Fordham Rd
  - Cross Bronx Expressway
Cross Bronx Expressway

Banning left-turns at the CBE on-ramp simplifies operations at this very congested intersection. NB vehicles are rerouted to Ittner Pl.

Dual right-turning lanes better accommodate the high vehicle volumes accessing the CBE

Convert Ittner Place to one-way to improve access onto the CBE

SB Bus-Only Queue Jump allows buses to get ahead of traffic where there is no bus lane
**E Tremont Avenue**

- **Lengthened Left-Turn Bay** creates more storage space.
- **Simplify Valentine Avenue Design**
- **New pedestrian crossings**
- **Convert E 178 St to WB one-way** to allow rerouted SB left-turns to access E Tremont Ave.

**Banned SB left-turns** improve intersection safety. Saved signal time goes to NB Webster Ave. Vehicles rerouted via E 178 St.
Banned EB and WB left-turns simplify intersection operations. Saved signal time goes to Webster Ave NB and SB right-turn bays add storage space for turning vehicles and keep the bus lane clear. Lengthened Left-Turn Bays create more storage space for heavy left-turning volumes.
E Gun Hill Road

Thru and right-turn only lanes improve traffic organization on this congested approach.

Increase signal time for congested turning movements.

Curbside bus lane and Bus-Only RT signal phase helps buses get through the intersection faster.
Questions?
Existing bus services

- **Webster Avenue**
  1. Bx41 LTD
  2. Bx41 Local
  3. Bx55 (Limited) north of Fordham Plaza

- **Third Avenue**
  1. Bx15 (Local)
  2. Bx55 (Limited)

- **Bainbridge / Valentine Avenues**
  1. Bx34 (Local)
Proposed bus services

- **Webster Avenue**
  1. Bx41 LTD  Bx41 SBS
  2. Bx41 Local
  3. Bx55 (Limited) north of Fordham Plaza
  4. SBS to LaGuardia Airport

- **Third Avenue**
  1. Bx15 (Local)
  2. Bx55 (Limited)  Bx15 LTD

- **Bainbridge / Valentine Avenues**
  1. Bx34 (Local) Rerouted
Webster Avenue

- Bx41 LTD → Bx41 SBS
  - ½ mile stop spacing
  - Service will run frequently all day

- Bx41 Local
  - No change to stop spacing
  - Service every ~10 minutes

- Off board fare collection (like the Bx12 SBS on Fordham Road)
Third Avenue

- **Bx15 Local**
  - Replaces the Bx55 route (weekday only) with an all times route
  - Local stops: The Hub ↔ Fordham Plaza

- **Bx15 LTD**
  - Local stops: Harlem 125th St ↔ The Hub
  - Limited stops: The Hub ↔ Fordham Plaza

- No Third Avenue bus service north of Fordham Plaza
Other bus services

- SBS to LaGuardia Airport
  - Off board fare collection
  - Same stops as Bx41 SBS north of The Hub
  - Connects to 6 train

- Reroute the southern portion of the Bx34 route to Webster Avenue
Questions?
Project timeline

Winter 2011-12
Design Ideas

Spring 2012
Develop Draft Corridor Plan

Summer 2012
Refine Plan Based on Feedback

Fall 2012

Winter 2012-13
Final Design & Implementation

2013-2014

PUBLIC OUTREACH

CAC Meetings and Public Open House to introduce project and discuss possible SBS designs for Webster Avenue

CAC Meetings to review preferred designs and station locations

CAC Meeting and Public Open House to review final draft plan

Present final design at CAC Meeting and Public Open House

New York City Transit
Next steps

Winter 2012/13

- Technical Advisory Committee meeting with other relevant city agencies
- Public Open House #2 – January 2013
- Finalize plan based on public feedback
- Finalize traffic and environmental analysis
- Continue development of curb regulation plan
- Present to Community Boards along the project corridor to discuss specific designs