Select Bus Service: The New York City Experience





Background

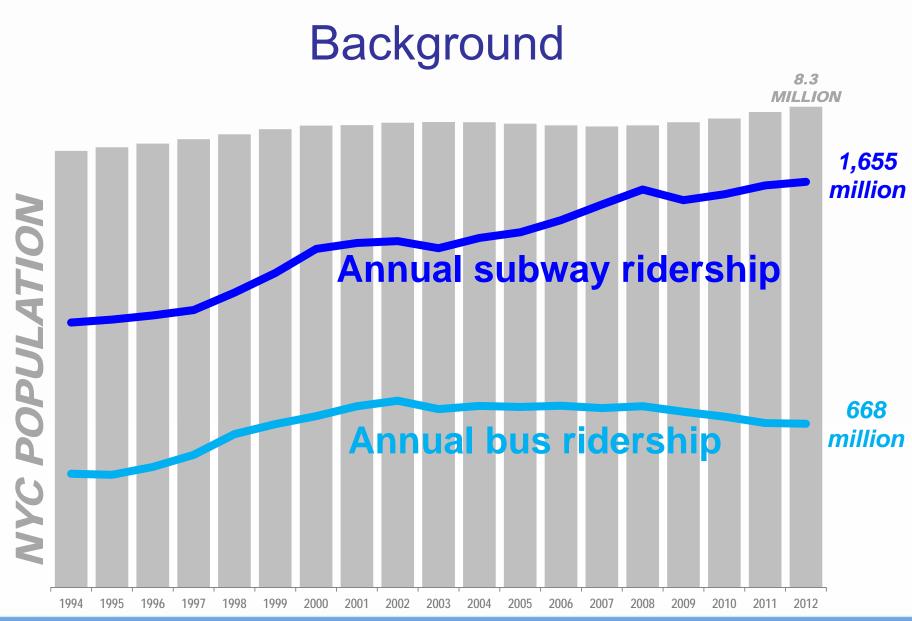
- MTA New York City Transit:
 - Part of Metropolitan Transportation Authority (New York State)
 - Operator of New York City's public transit system
 - Over 5.3 million subway and 2.2 million bus trips per day
- New York City Department of Transportation:
 - New York City mayoral agency
 - Operator of New York City's 6,000 miles of streets, 787 free bridges, 12,000 traffic lights, and the Staten Island Ferry





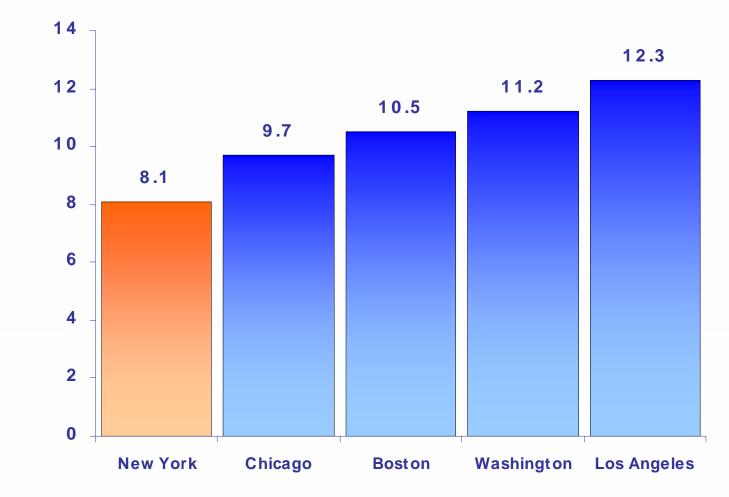








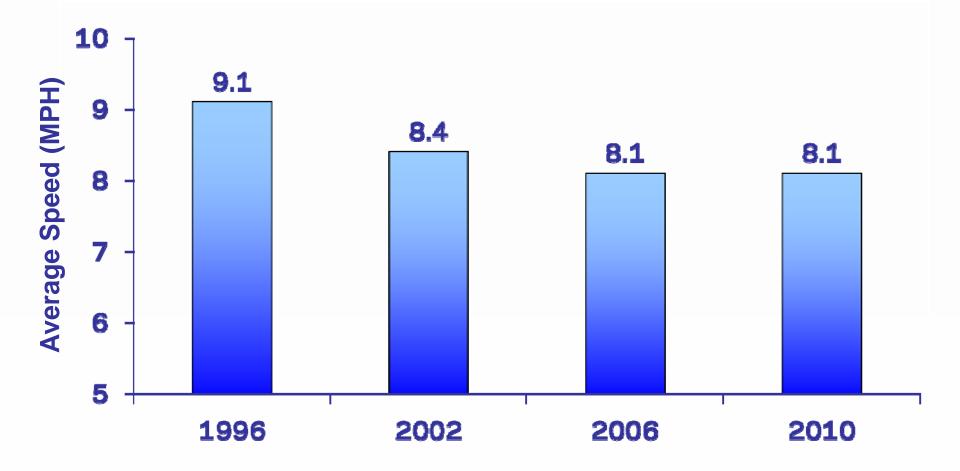
Background: Bus Speeds



Average Speed (MPH)

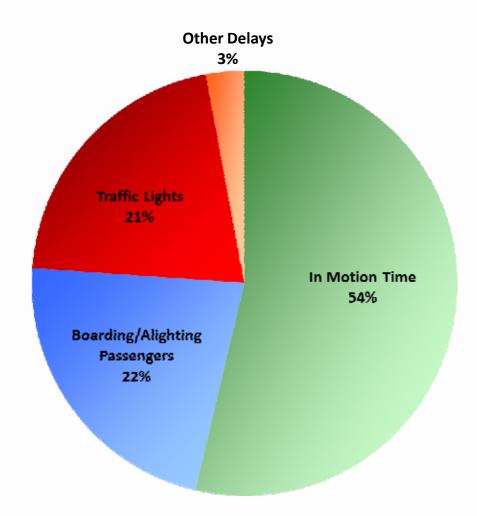


Background: Bus Speeds





Sources of Bus Delay







Features of Select Bus Service



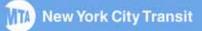












Bus Lane Cameras





Pre-Payment









Transit Signal Priority





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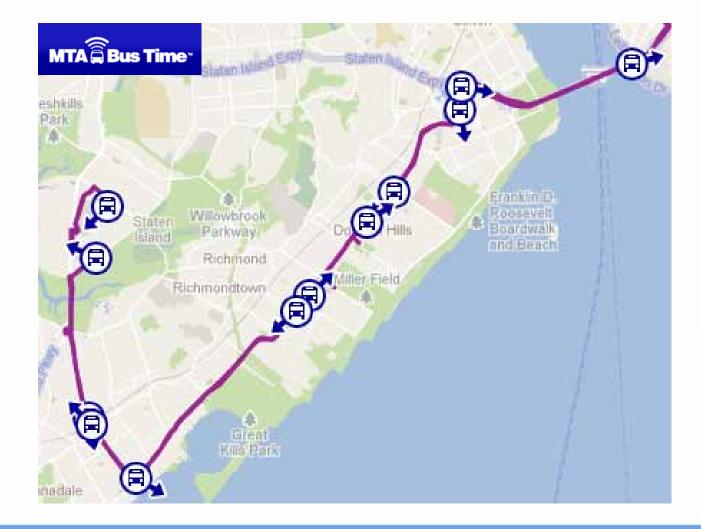


+selectbusservice

South Ferry



Passenger Information





Stations



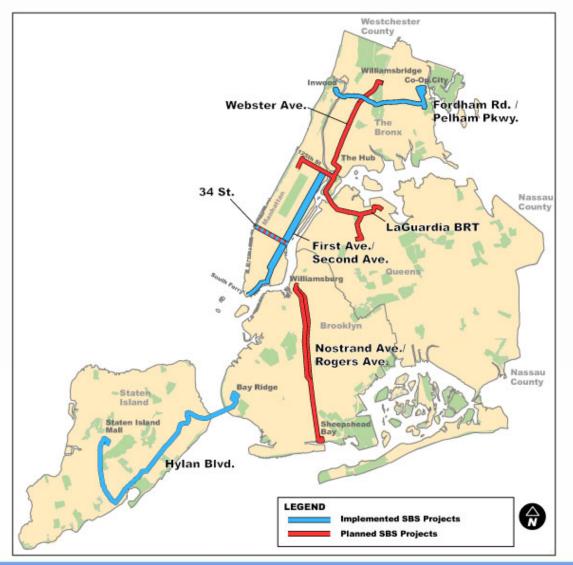


Stations: Bus Bulbs





SBS Corridors In Progress









SBS Results

Fordham Road/Pelham Parkway:

- New/Upgraded bus lanes
- Off-board fare collection
- Transit Signal Priority
- Simplified Service Pattern
- New Shelters

Implemented June 2008:

- 46,000 daily riders
- 20% reduction in travel time
- 10% increase in ridership
- **~\$10M** implementation cost





SBS Results



First Avenue/Second Avenue:

- New/Upgraded bus lanes
- Off-board fare collection
- New low floor 3-door buses
- Integration with bicycle network

Implemented October 2010

- **57,000** daily riders
- 15-18% reduction in travel time
- **10%** increase in ridership
- **~\$10M** implementation cost
- Bus bulbs, TSP, ~\$10M additional

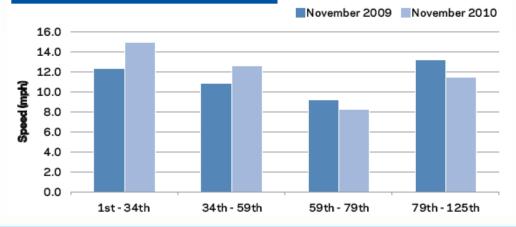


SBS Results: Traffic

November 2009 November 2010 16.0 14.0 12.0 10.0 8.0 6.0 4.0 2.0 0.0 1st - 34th 34th - 59th 59th - 79th 79th - 125th

Figure 12: Average Speeds from Taxi GPS data on First Avenue

Average Speeds on Second Avenue



Average Speeds on First Avenue

- Roadway speeds measured using GPS devices in in-service yellow taxis, for trips beginning and ending on First Avenue or Second Avenue
- Evaluation showed minimal changes in traffic speeds
- Traffic volumes also showed minimal changes



SBS Results

34th Street SBS:

- Bus lanes implemented in 2008
- Off-board fare collection in 2011
- Simplified route pattern/brand
- Bus bulbs, offset bus lanes, articulated buses coming in 2013

Results to date:

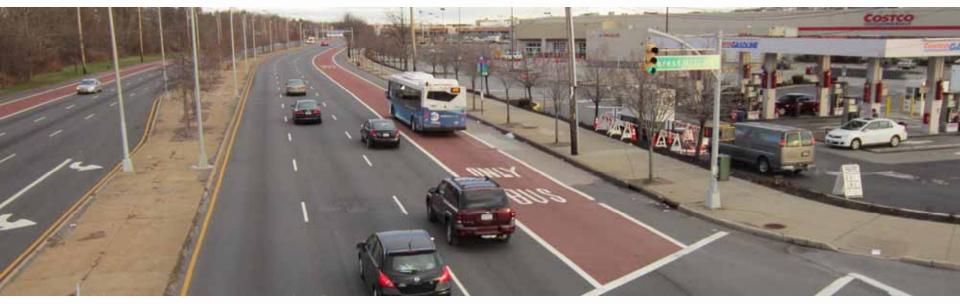
- 21,000 daily riders
- 23% reduction in travel time
- 31% increase in ridership
- ~\$20M project cost (including 2013 implementation)







SBS Results



Hylan Boulevard SBS:

- Peak period bus lanes
- Simplified route pattern/brand
- Pedestrian safety improvements
- Left turn bays/traffic flow improvements

Implemented September 2012:

- 32,000 daily corridor riders (half on express buses to Manhattan)
- 12% service increase (too early for detailed ridership counts)
- ~\$6M project cost





Nostrand/Rogers SBS:

- New bus lanes
 - 5 miles of offset bus lanes maintenance of parking along entire route
- Off-board fare collection
- New low-floor articulated buses
- Transit Signal Priority
- Bus bulbs at 14 stations
- Funded by \$28M FTA New Starts Grant
- Implementation: Fall 2013





Nostrand/Rogers SBS:





Webster Avenue SBS:

- Bx41 LTD \rightarrow 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
- Summer 2013 projected launch
- Bus bulbs in 2015





Webster Avenue SBS:







LaGuardia Airport SBS:

- Goal to both serve the airport, and to provide better neighborhood service to 125th Street, Jackson Heights
- Substantial outreach underway for project, particularly along 125th Street
- M60 SBS, Q70 services tentatively scheduled for Summer/Fall 2013
- Bronx service not funded





LaGuardia Airport SBS:







Future SBS Corridors





Lessons Learned

- Agency partnership key to implementing good projects
- Measure success based on outcomes
 - Ridership increases
 - Speed of service
 - No other negative effects (traffic, safety, etc)
- Value of fast and (relatively) cheap solutions
- Accept working in a multi-modal environment
- Don't let the perfect be the enemy of the good

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