Utica Avenue Bus Priority and Safety Study

Brooklyn CB 9
September 24, 2013
Project Overview

- Focus on Utica Avenue from St. Johns Place to Church Avenue
- Key intersections at Eastern Parkway, Empire/Lefferts, Church Avenue
- Study goals
  - Improve pedestrian and driver safety
  - Improve bus travel times
  - Maintain parking and curb access
Transit Needs:
B46 Bus Service

- Limited subway access
- B46: second busiest bus route in NYC
- Over 49,000 bus passengers per weekday
- Average speed of 6.8 mph, below Bklyn avg.
- Congestion: slower buses and bus bunching
Safety Needs:
Carroll St. to Church Ave.

- Speeding: 63% of vehicles exceed speed limit (30 mph)
- Crash stats 2006-2010:
  - 766 total crashes
  - 41 severe injuries
  - 2 fatalities
- Utica has among the highest rate of injury from motor vehicle crashes in Brooklyn
Parking Needs: Merchant Request

- Request for expanded parking on Utica Ave. bet. Eastern Parkway and Carroll St.
- DOT seeking to balance parking needs with needs of B46 bus riders

Bus Lane: Carroll St. to President St.
• Key Feedback
  – B46 provides an important service for the local community
  – Pedestrian safety concerns, esp. at Eastern Pkwy., East New York Ave., and Church Ave.
  – Risky driving concerns, inc. speeding, illegal U-turns and lefts, esp. by dollar van drivers
  – Maintaining street parking supply is important to local businesses (particularly near Eastern Parkway)
  – More enforcement needed
  – Need to coordinate signal timing better
  – Do not impact traffic flow
Proposed Plan:
St. Johns Pl. to Carroll St.
Existing Conditions

- Traffic congestion is worst on approaches to Eastern Parkway

Diagram:
- Parking>Loading
- Bus Stop
- Bus Only Lane

St Johns Pl
Lincoln Pl
Eastern Parkway
Union St
President St
Carroll St

7 AM-7 PM Bus Lane
7 AM-10 AM & 4 PM-7 PM Bus Lane
Proposed Improvement

- Relocates bus lane to SB approach
- Provides more parking bet Pres. and Carroll Sts
- Reduces bus delays on SB approach to Eastern Pkwy.
- Net gain: 19 peak period parking spaces
Improvement Concepts: Carroll St. to Church Ave.
Proposed Solutions

• Convert one travel lane to “offset” bus lane to reduce speeding, maximize parking, and benefit bus service
• To improve safety and traffic flow: add left turn bays at some intersections, prohibit left turns elsewhere
• Implement Transit Signal Priority, optimize corridor signal timings
Utica Ave at Church Ave

- Busiest single route bus to bus transfer in city
- Very high crash location
- Proposal for offset bus lanes, bus bulbs, LT prohibition
- High traffic volumes
Left Turns: Existing Condition

NOTE: GREYED OUT OBJECTS INDICATE PARKED VEHICLES
Left Turns: Bus Lane Concept
Potential Left Turn Bans

• Safety Benefits
  – Reduce conflicts between pedestrians and vehicles
  – Reduce conflicts between through traffic and turning vehicles

• Traffic Benefits
  – Reduces traffic congestion
Potential Left Turn Bans

- Lenox Road – community concerns about LT ban
- Proposal to create LT bay would require curbside bus lane SB
- Would require removing 6 parking spaces in front of post office, Citibank
Traffic Signal Changes

- Optimize traffic signal offsets for all traffic
- Increase signal cycle from 60 seconds to 90-120 seconds
  - Increase green time for Utica Avenue while maintaining safe pedestrian crossing times
  - Better match cycles at Church, Linden, Eastern Parkway
- Implement Transit Signal Priority from Kings Highway to Broadway (with NYCT)
Traffic Analysis

• Measured traffic conditions at all intersections in AM, MD, PM peak hours

• “Synchro” network constructed to evaluate all intersections with coordinated signal timing

• Build conditions included all traffic lane changes, signal timing changes

• Analysis shows that project will maintain traffic flow at all intersections, in all peak periods
  – In PM peak, 10 intersections improve, 7 neutral, 1 declines slightly (LOS B to LOS C)
Project Benefits

Transit:
• Faster, more reliable service on B46
• Sets groundwork for potential future Select Bus Service

Safety:
• Bus lanes help reduce off-peak traffic speeding
• Left turn restrictions and bays improve pedestrian safety

Traffic:
• Maintains all traffic at acceptable level of service

Parking:
• +19 parking spaces near Eastern Parkway
• -22 parking spaces along southern part of corridor (~1 per block face)
Next Steps

- Present proposed changes to CBs for feedback
- Finalize implementation plan and schedule – proposed for Spring 2014
Questions?