

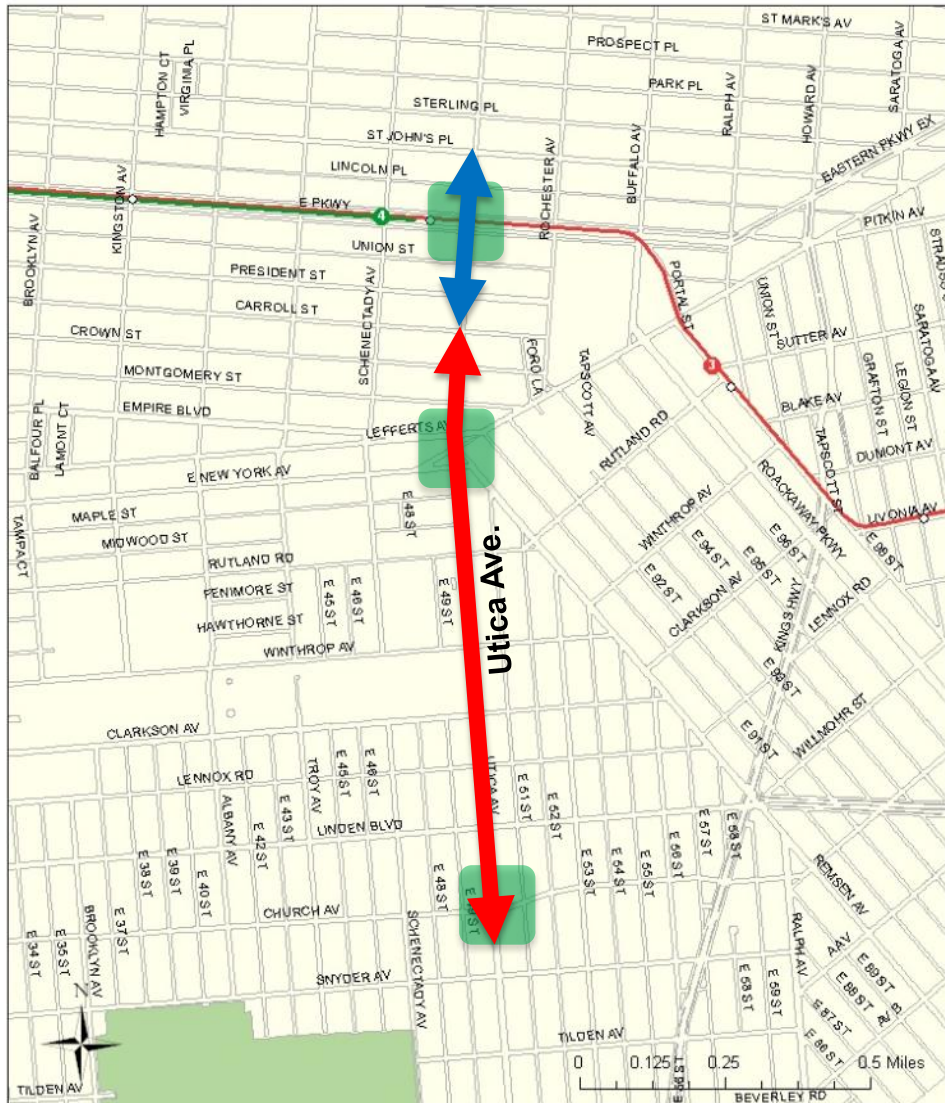


# Utica Avenue Bus Priority and Safety Study



Brooklyn CB 8, September 12, 2013

# Project Overview



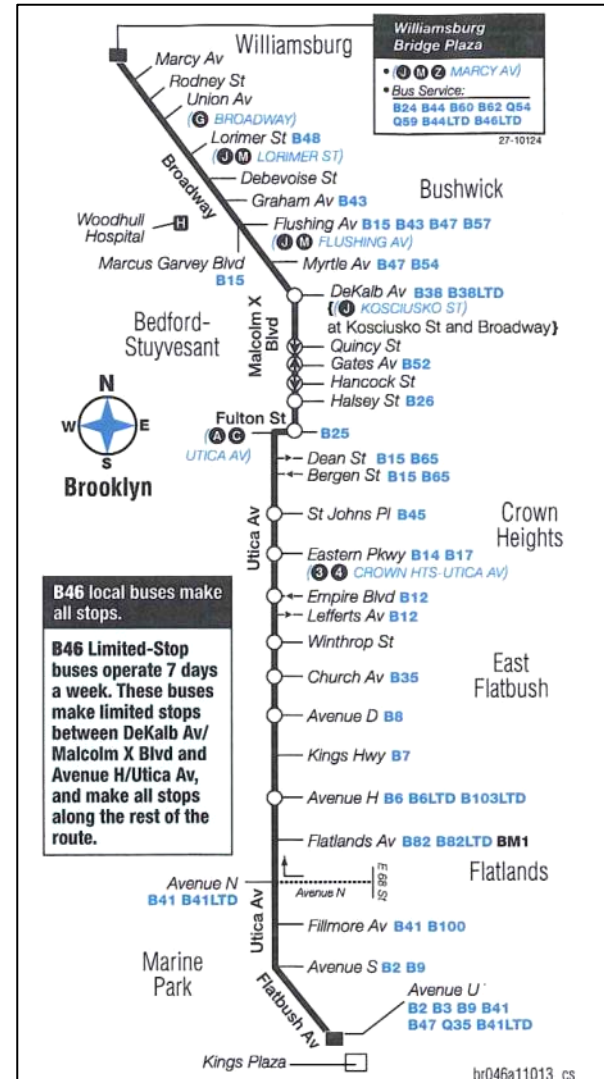
- Focus on Utica Avenue from St. Johns Place to Church Avenue
- Key intersections at Eastern Parkway, Empire/Lefferts, Church Avenue
- Study goals
  - Improve pedestrian and driver safety
  - Improve bus travel times
  - Maintain parking and curb access





# 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





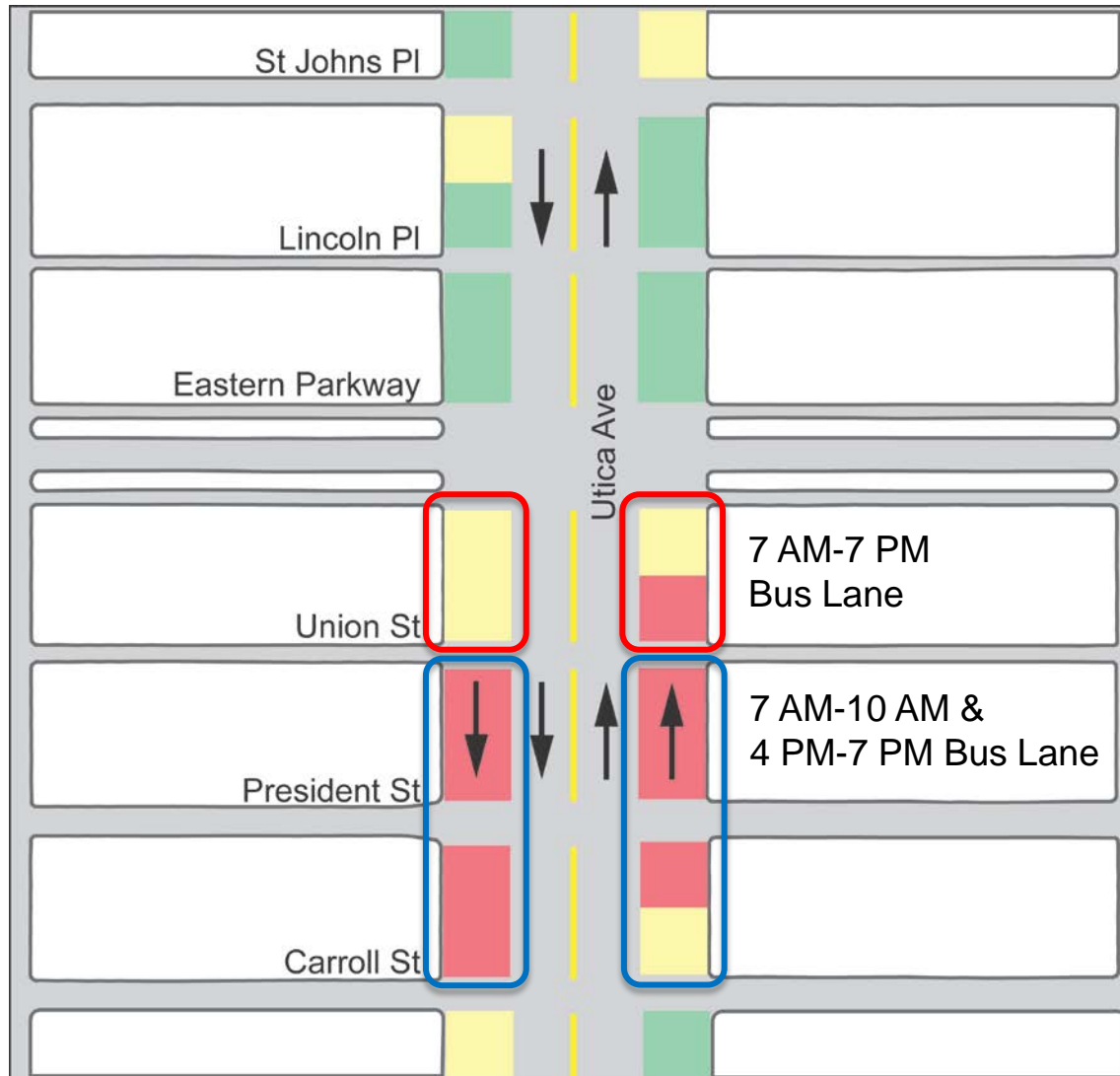
# Community Feedback

- 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



St. Johns Pl. to Carroll St:

# Existing Conditions



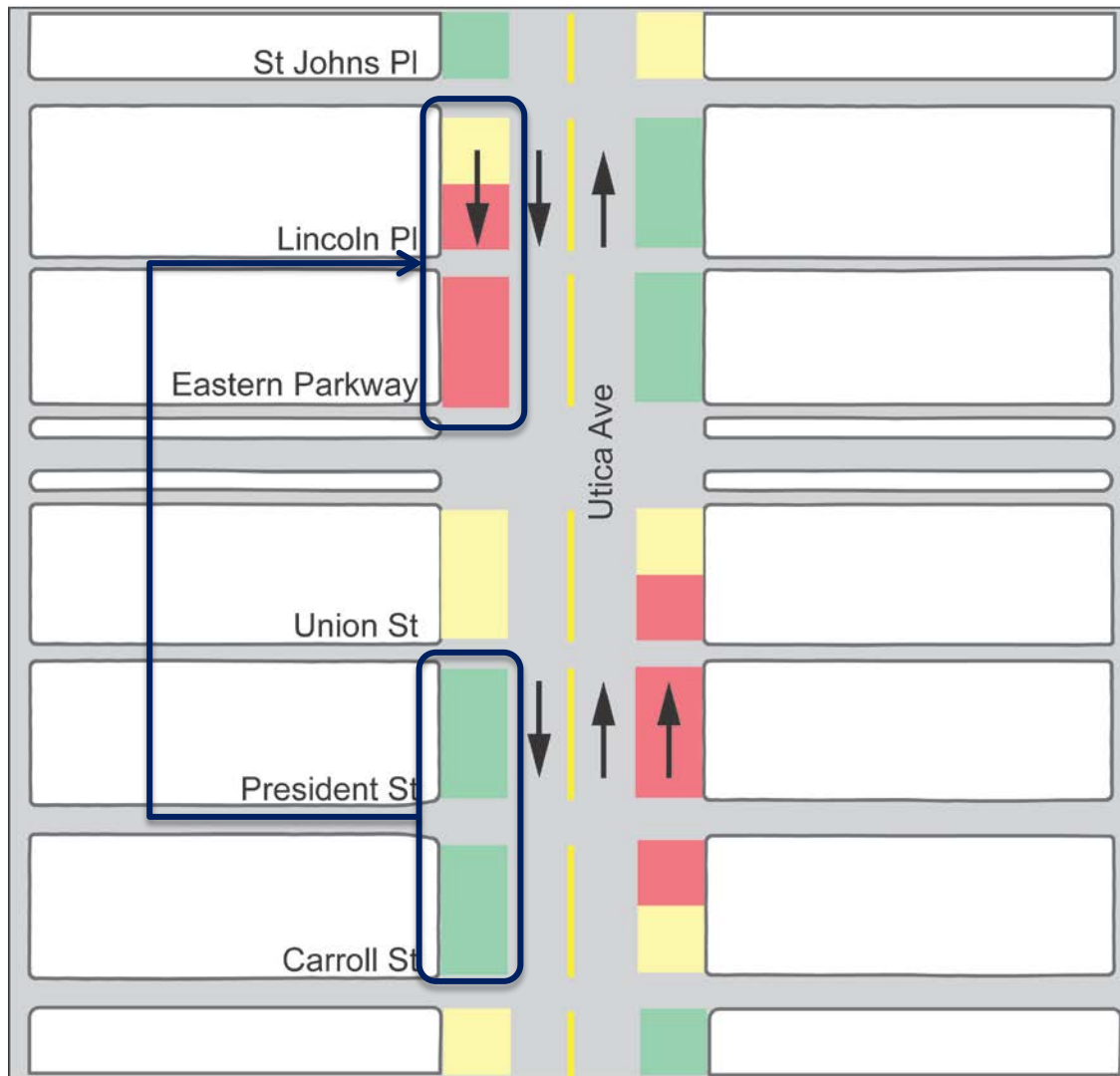
- Parking/Loading
- Bus Stop
- Bus Only Lane

- Traffic congestion is worst on approaches to Eastern Parkway





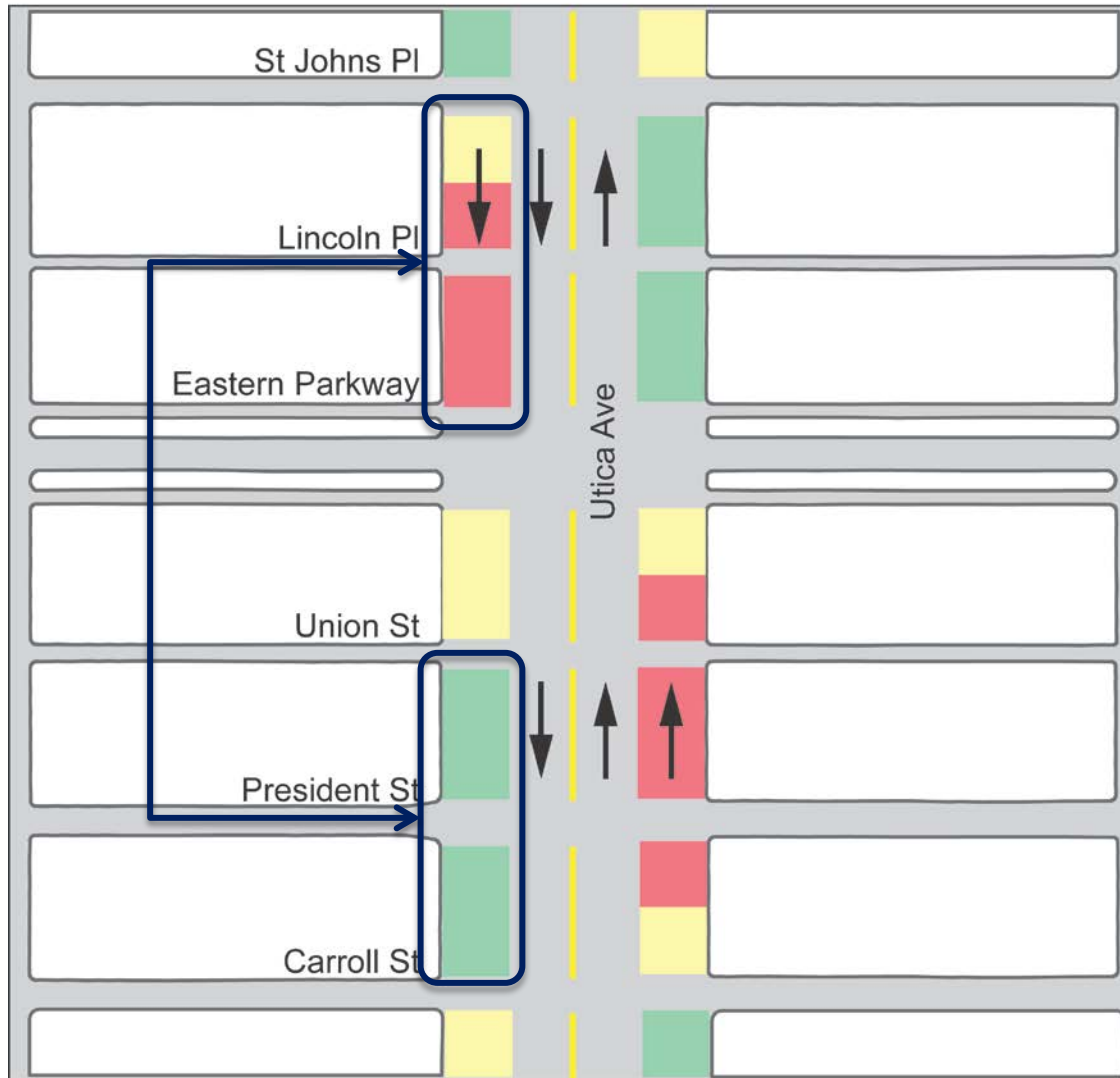
# Proposed Improvement






- Parking/Loading
- Bus Stop
- Bus Only Lane

- Remove bus lane Union-Carroll
- Install bus lane from St. John's Place to Eastern Parkway

# Proposed Improvement



-  Parking/Loading
-  Bus Stop
-  Bus Only Lane

- Reduces bus delays on SB approach to Eastern Pkwy.
- Net gain: 19 peak period parking/loading spaces



Carroll St. to Church Ave:



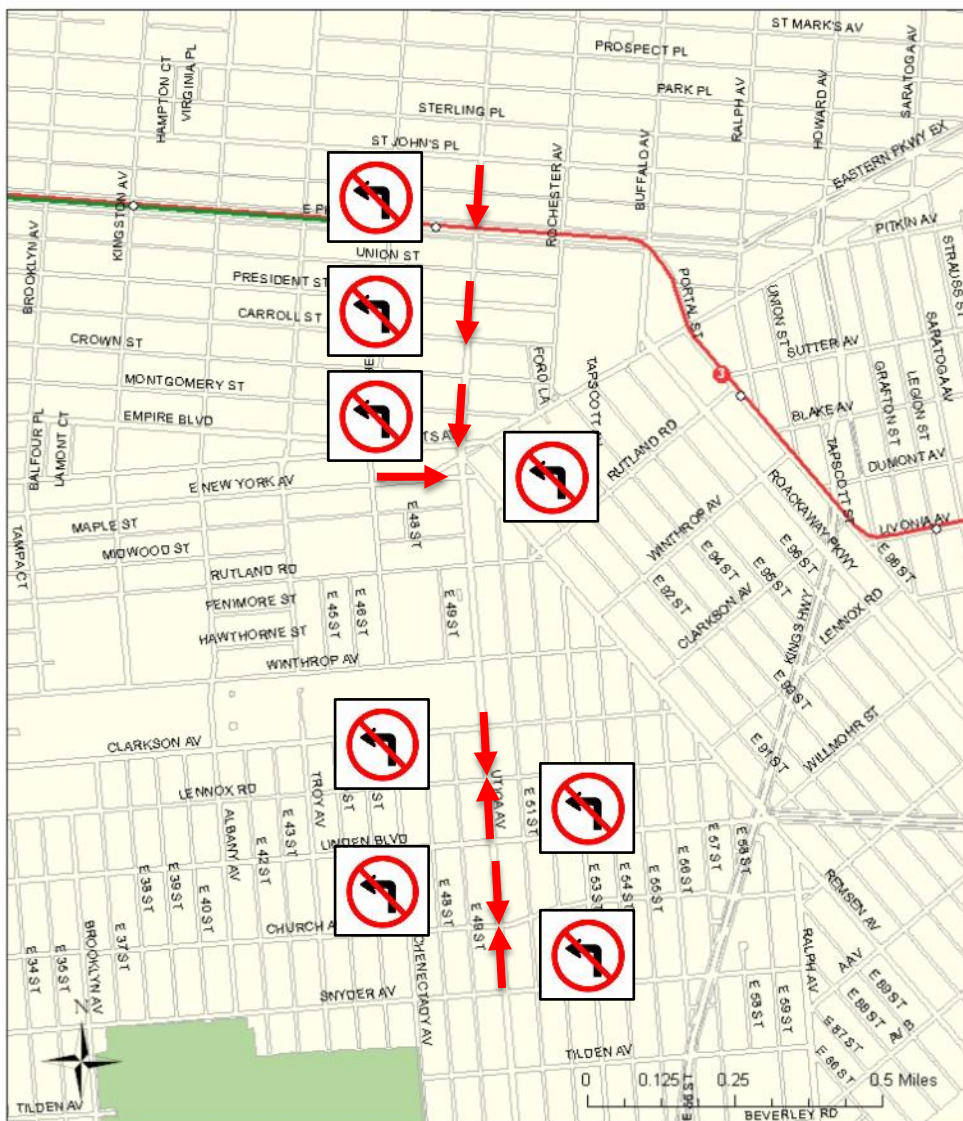
# Proposed Solutions



- 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
- Adjust bus lanes near Eastern Parkway to increase parking



# Potential Left Turn Bans

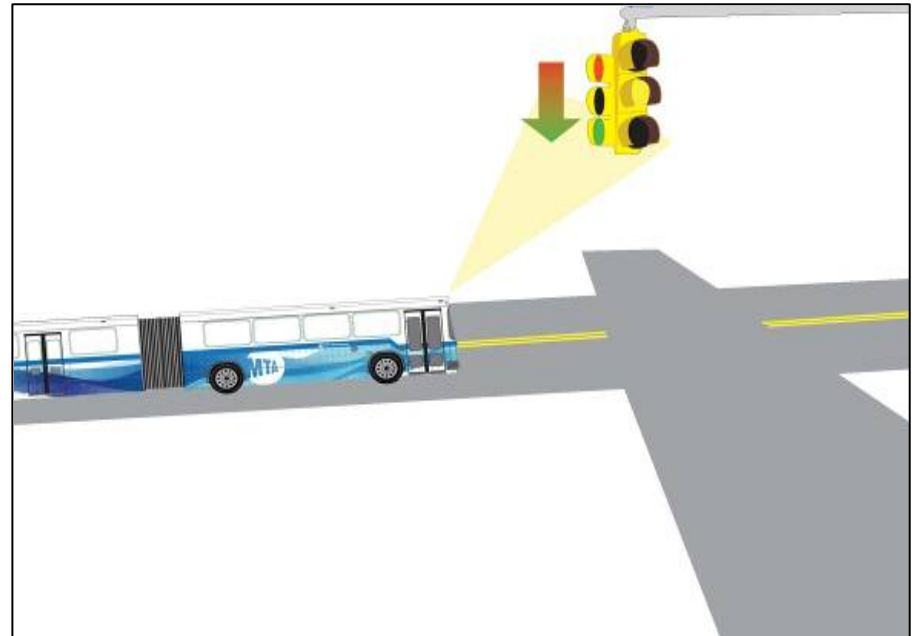


- Safety Benefits
  - Reduce conflicts between pedestrians and vehicles
  - Reduce conflicts between through traffic and turning vehicles
- Traffic Benefits
  - Reduces traffic congestion



# 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 (within 3 blocks)
- -22 parking spaces along southern part of corridor (~1 per block face)





# Next Steps

- Present proposed changes to CBs
- Finalize implementation plan and schedule – potentially Fall 2013
- Develop capital project for bus bulbs (if desired)



# Questions?

