

Woodhaven / Cross Bay Boulevard (Q52/53)

Presentation to Community Board 6 | May 13, 2015



+selectbusservice



Presentation outline

- 1. Project background**
- 2. Proposed corridor design**
- 3. Traffic analysis**
- 4. Proposed SBS route and stations**
- 5. Project benefits**

Project background

Project background



Congested Corridor Study

- Initial safety and traffic improvements on Woodhaven Blvd 2011-2013
- 2014-2015 bus and safety improvements
- Long-term recommendation for Select Bus Service and capital project



Bus Rapid Transit (BRT) Phase II Plan

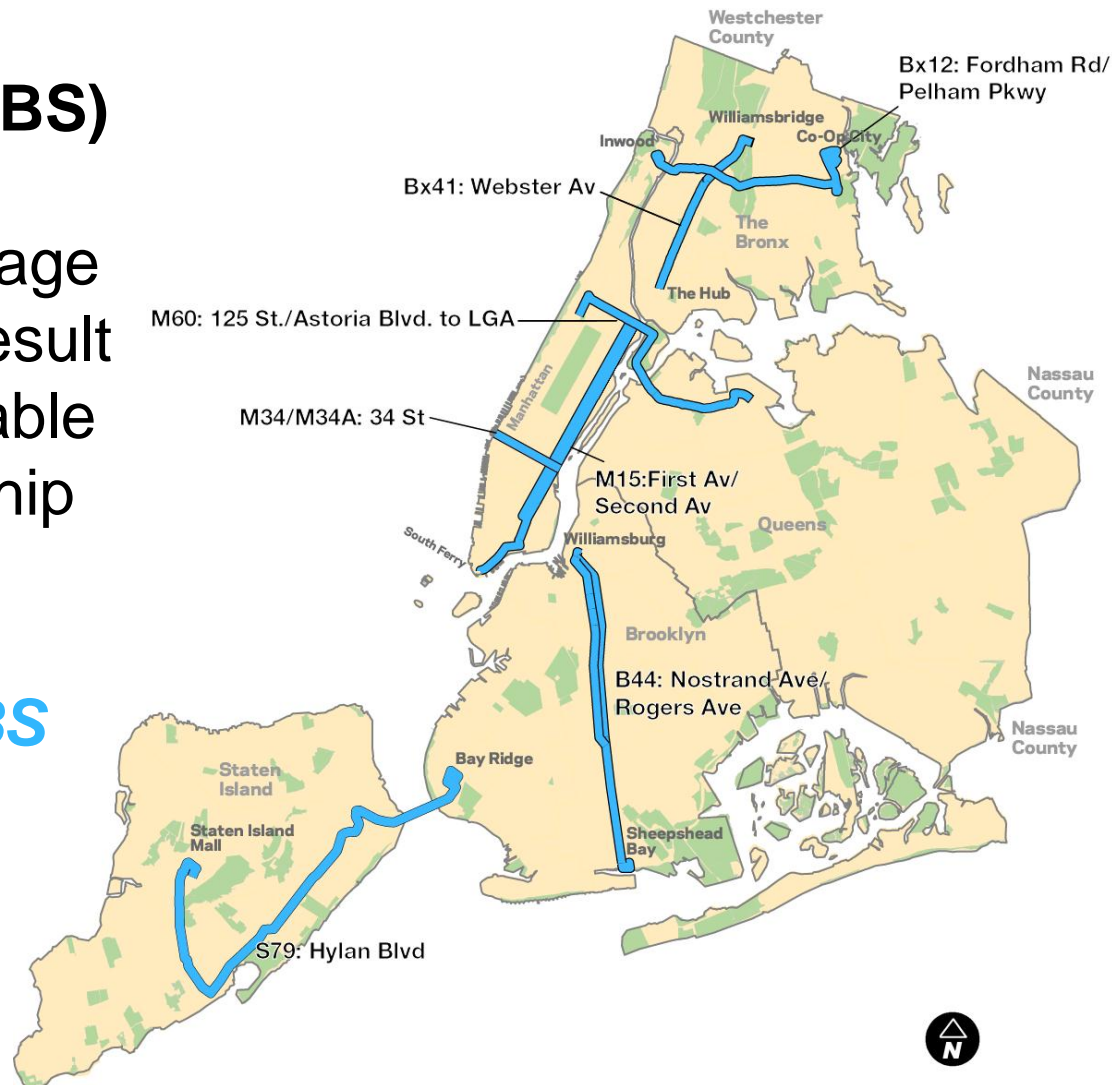
- Woodhaven Blvd identified as priority transit corridor at Public Meeting
- Chosen as a Phase II Select Bus Service (SBS) Corridor

Select Bus Service in New York City

Select Bus Service (SBS)

is New York City's brand name for a package of improvements that result in faster and more reliable service on high-ridership bus routes.

There are seven SBS routes currently operating in NYC



Select Bus Service Features



Improved fare collection



Bus lanes



Transit signal priority



Passenger Information



Stations & Amenities



Branding

Select Bus Service Results

Faster Bus Service

Speeds have increased by 15-23%

Popular

Customer satisfaction of 95%+

Increased Ridership

Trips increased by 10%

Safer Roadways

Crashes reduced by over 20%

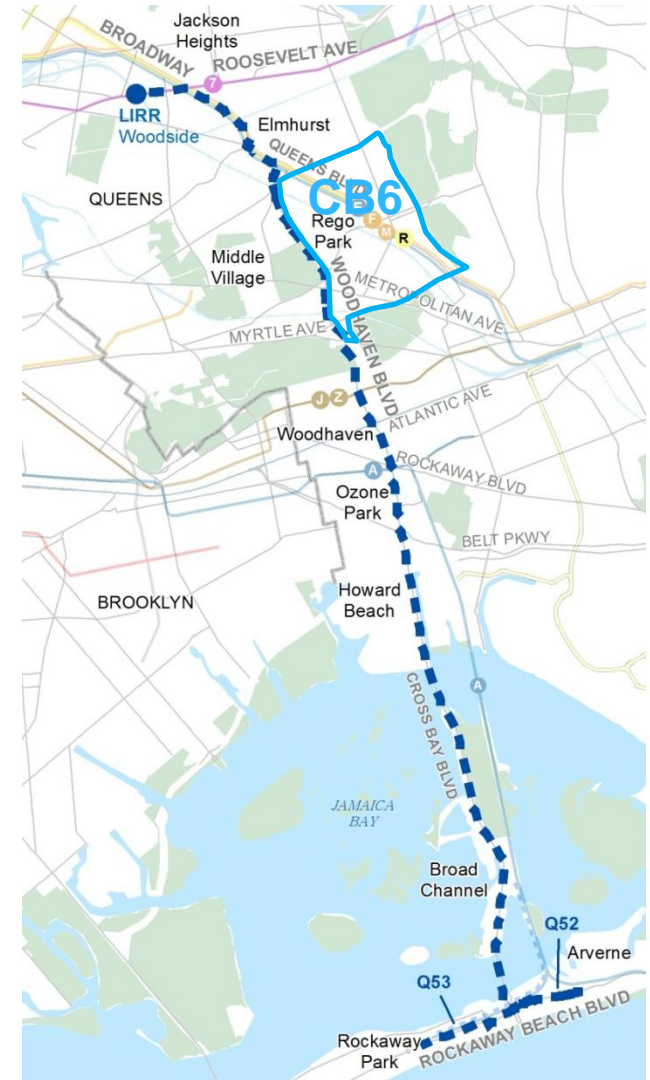
Proven Success

7 SBS routes in operation, carrying over 200,000 passengers daily



Woodhaven / Cross Bay SBS corridor

- Based on the existing Q52/53 LTD bus route
- 30,000 daily bus riders
- 14 miles long from Woodside to the Rockaways
- Within a 15-minute walk of the corridor:
 - 400,000 residents
 - 43% of households do not own a car
 - 60% of residents commute by transit



Community outreach process



Community Advisory
Committee



Public Open Houses
and Workshops



Community Board Meetings



Stakeholder Meetings

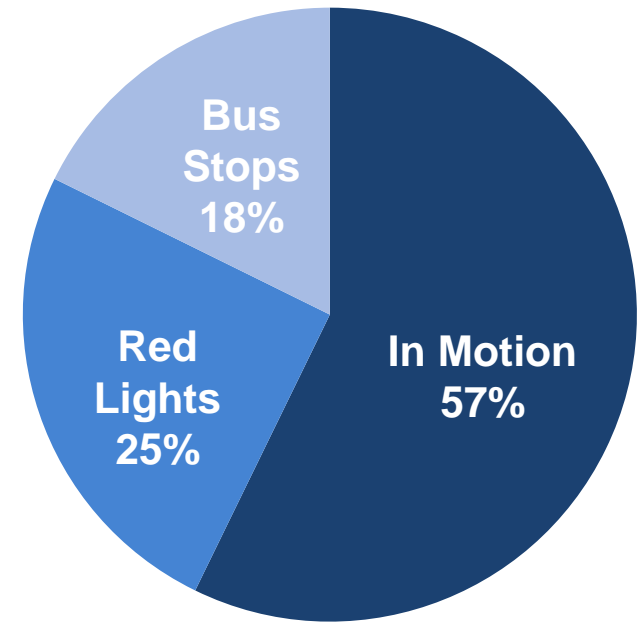
Community feedback

1. **Bus service** is unreliable and slow during rush hour
2. **Transit improvements** are needed to better serve customers, especially in the Rockaways
3. **Pedestrian crossings** are long and dangerous
4. **Congestion** leads to long and difficult trips for buses and drivers
5. **Changing road widths and configurations** make the corridor difficult to navigate



Transit

- One-way travel time can vary by up to 30 minutes (varies between 55 and 85 minutes)
- Q53 LTD buses are stopped almost half of the time
- Many passengers are riding the bus long distances



All Q53 Northbound Trips

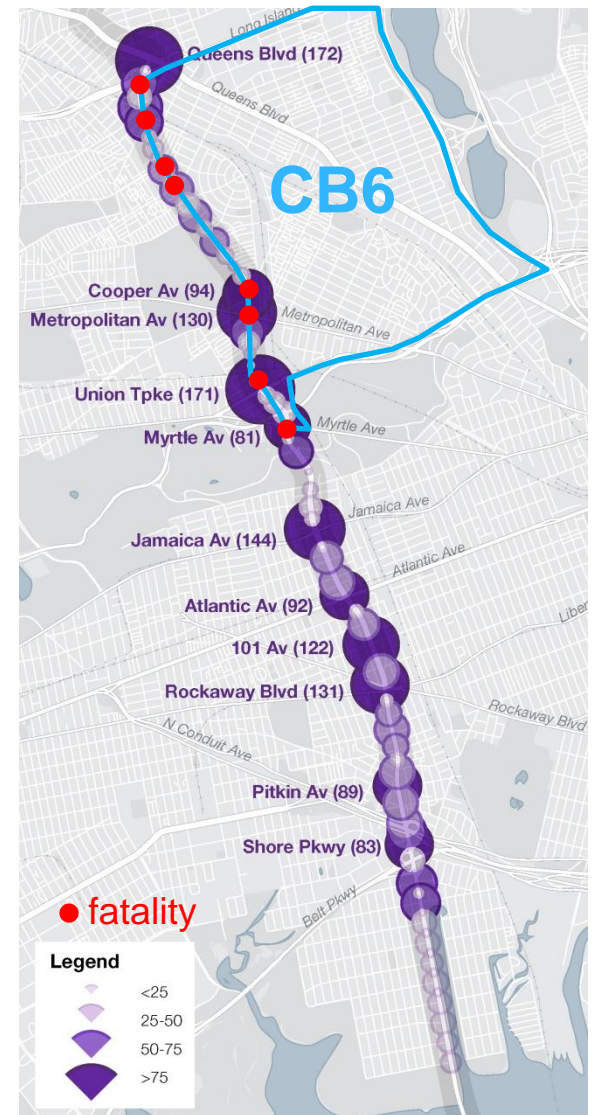


Safety

- Vision Zero Priority Corridor
 - Over 3,000 injuries (2009-13)
 - 22 fatalities (17 ped) (2009-13)
 - 8 fatalities (6 ped) in CB6
- Difficult pedestrian crossings
- Challenging roadway geometry

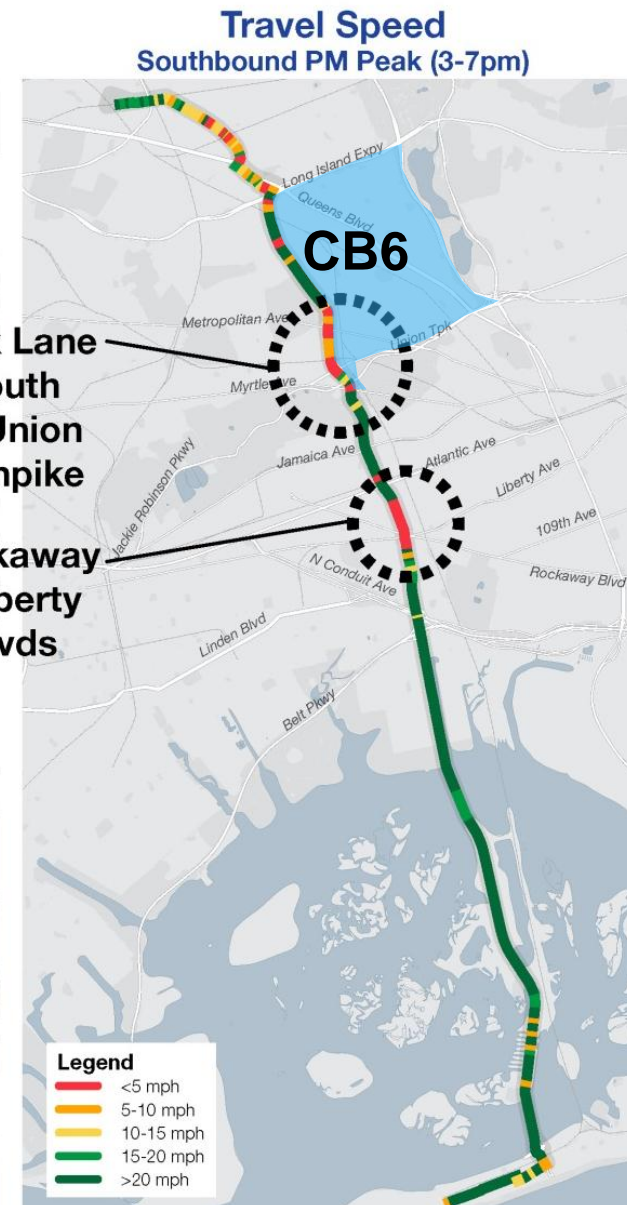
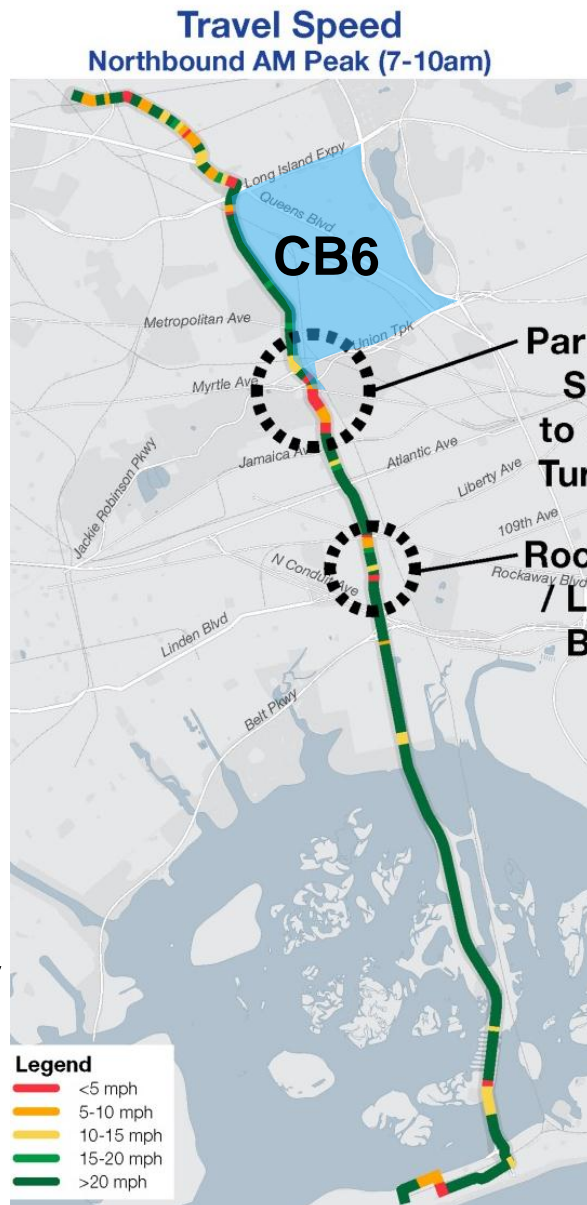


Total crashes by intersection
(2008-2012)



Traffic

- High traffic speeds along some portions of the corridor
- Congestion is concentrated at key points
- Traffic flow is uneven (“hurry up and wait”)



Traffic – bottlenecks

- Pinch-points on the corridor limit capacity; merging at bottlenecks is inefficient and unsafe
- Curbside activity and double parking reduce capacity of 4th travel lane



LIRR Overpass
4-to-3 lane bottleneck



Union Turnpike
Effectively 3-to-2 lanes
SB due to left-turns



Commercial Areas
Effectively 3 lanes due
to double parking

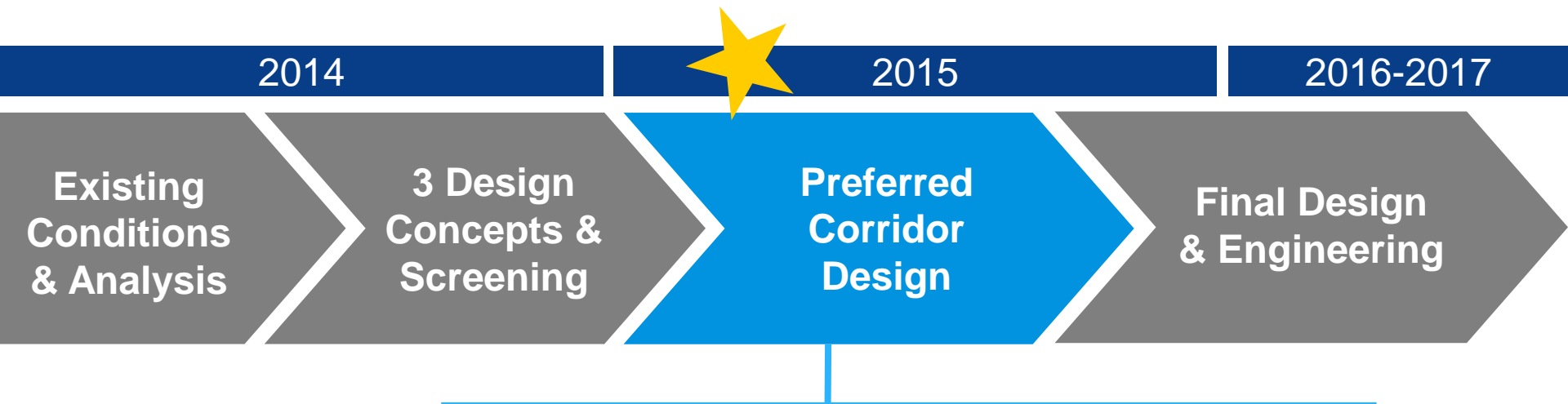
Project goal

Transform Woodhaven and Cross Bay Boulevards into a complete street where:

- Buses operate quickly and reliably
- Bus customers safely and easily access bus stations
- Pedestrians are comfortable walking on and crossing the street
- Drivers get where they need to go at a reasonable and safe speed



Design timeline



- Develop draft corridor design plan based on chosen design concept
- Public design workshops and stakeholder meetings
- Refine draft design through community feedback, technical analysis, and transportation goals for NYC

Proposed Corridor Designs

Screening process

Develop 3 Design Ideas



Concept 1: Offset Bus Lanes



Concept 2: Main Road Bus Lanes



Concept 3: Median Bus Lanes

COMMUNITY
INPUT

TECHNICAL
ANALYSIS

Choose a
preferred
corridor
design

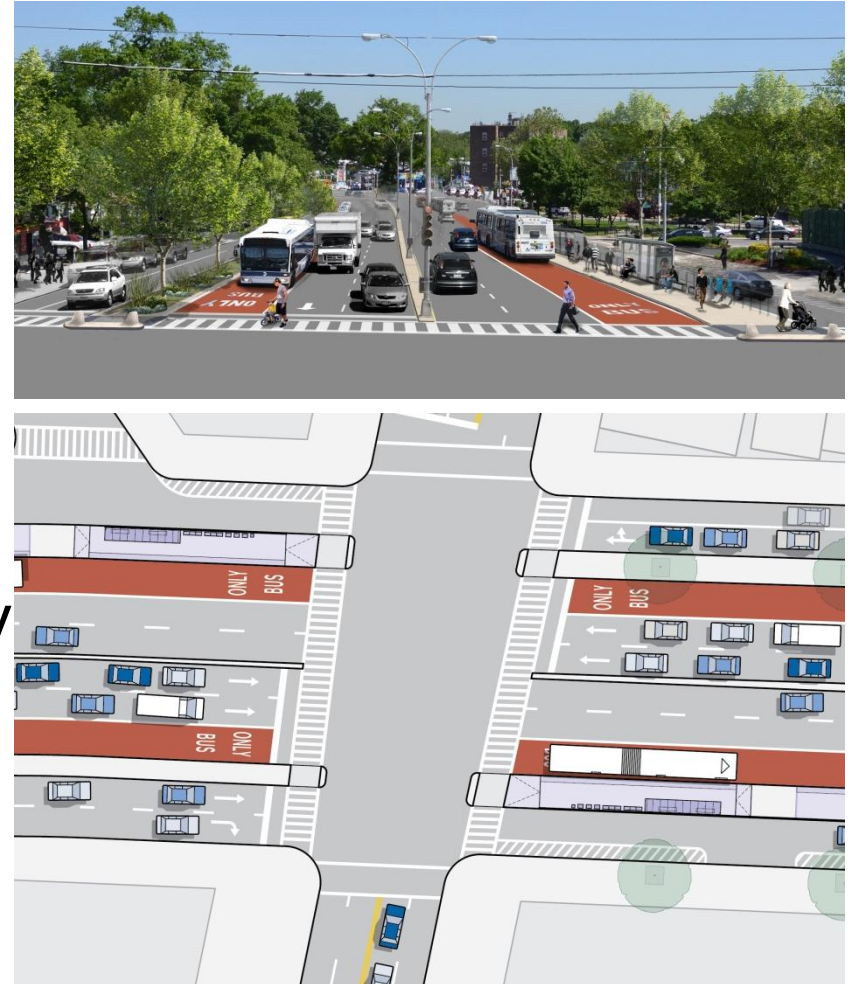


Concept 2:
Main Road
Bus Lanes for
Woodhaven
Boulevard

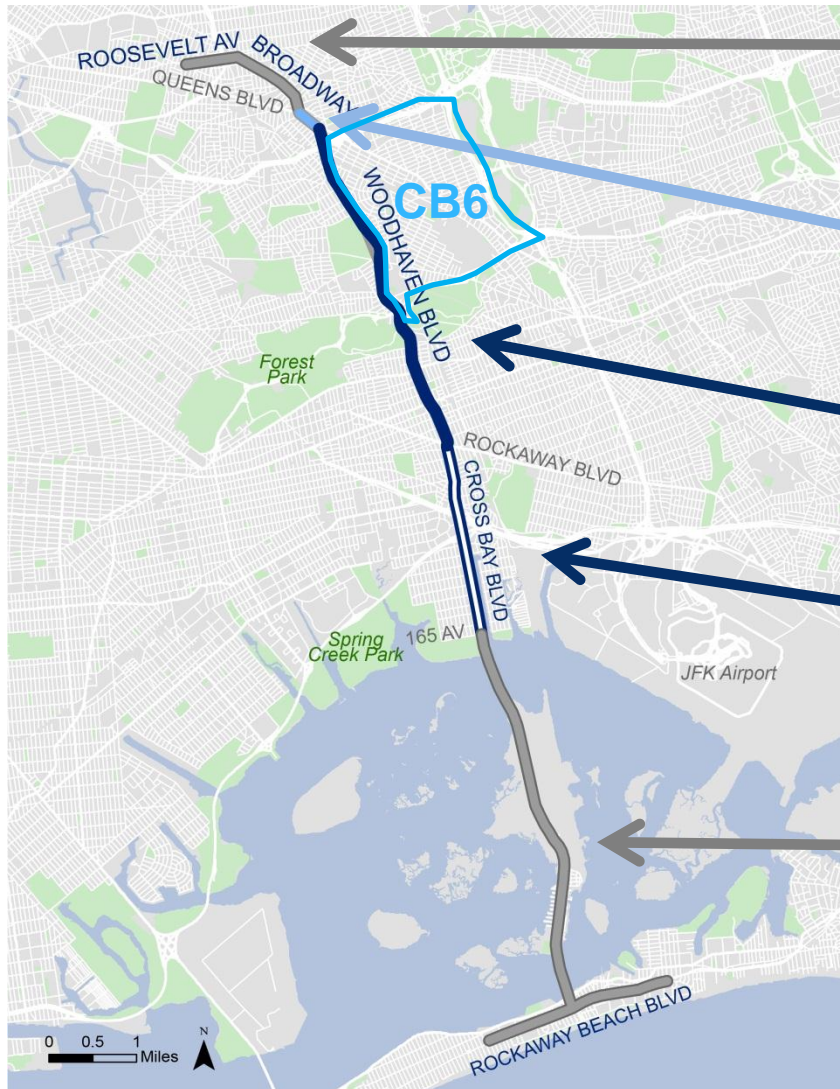
Summary of chosen concept

Main Road Bus Lanes

- Significant transit improvement
- Most potential for pedestrian and safety improvements
- Calmed service roads provide vehicle accessibility for local businesses and residences
- Organizes thru and local vehicle travel



Corridor design summary



- **Roosevelt Av / Broadway Av**

- No bus lanes
- Improved curbside bus stops

- **Queens Blvd and Hoffman Dr**

- Designated bus-only station areas
- Improved bus stops / transfers

- **Woodhaven Blvd**

- Main road bus lanes
- All buses use median stations

- **Cross Bay Blvd (north of 165 Av)**

- Offset bus lanes
- SBS buses stop at bus bulbs
- Local buses stop at the curb

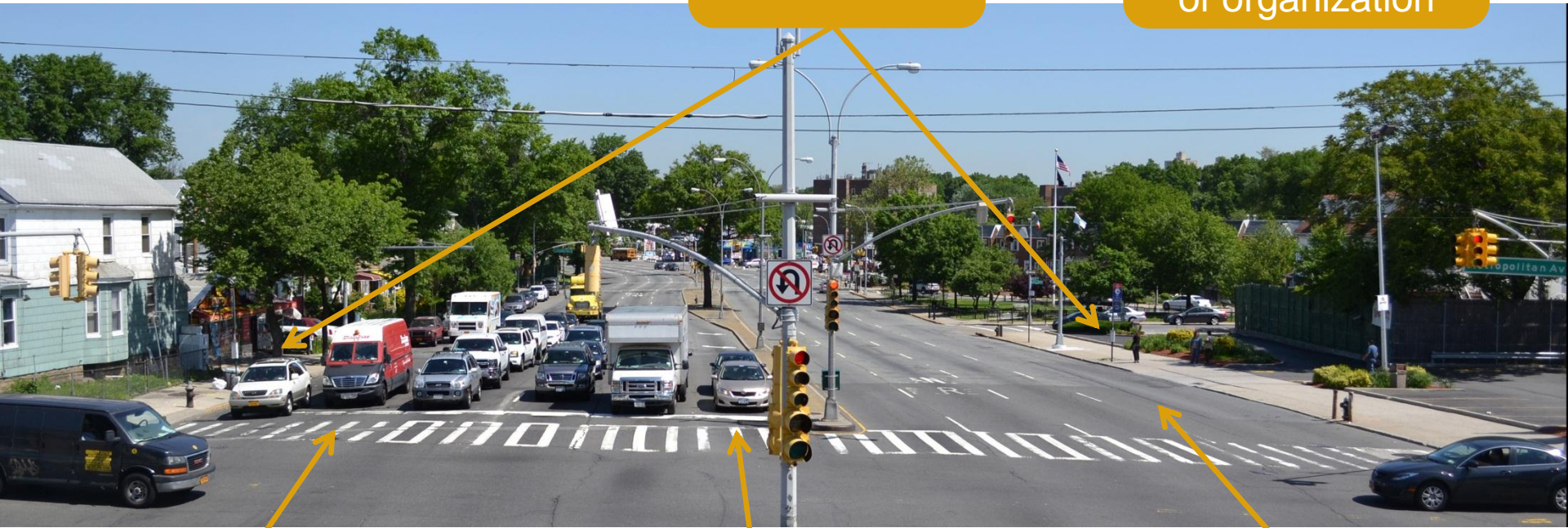
- **Broad Channel / Rockaways**

- No bus lanes
- Targeted transit priority treatments
- Improved curbside bus stops

Existing conditions - Woodhaven Blvd

Bus stops
lack amenities

All lanes are
mixed traffic; lack
of organization

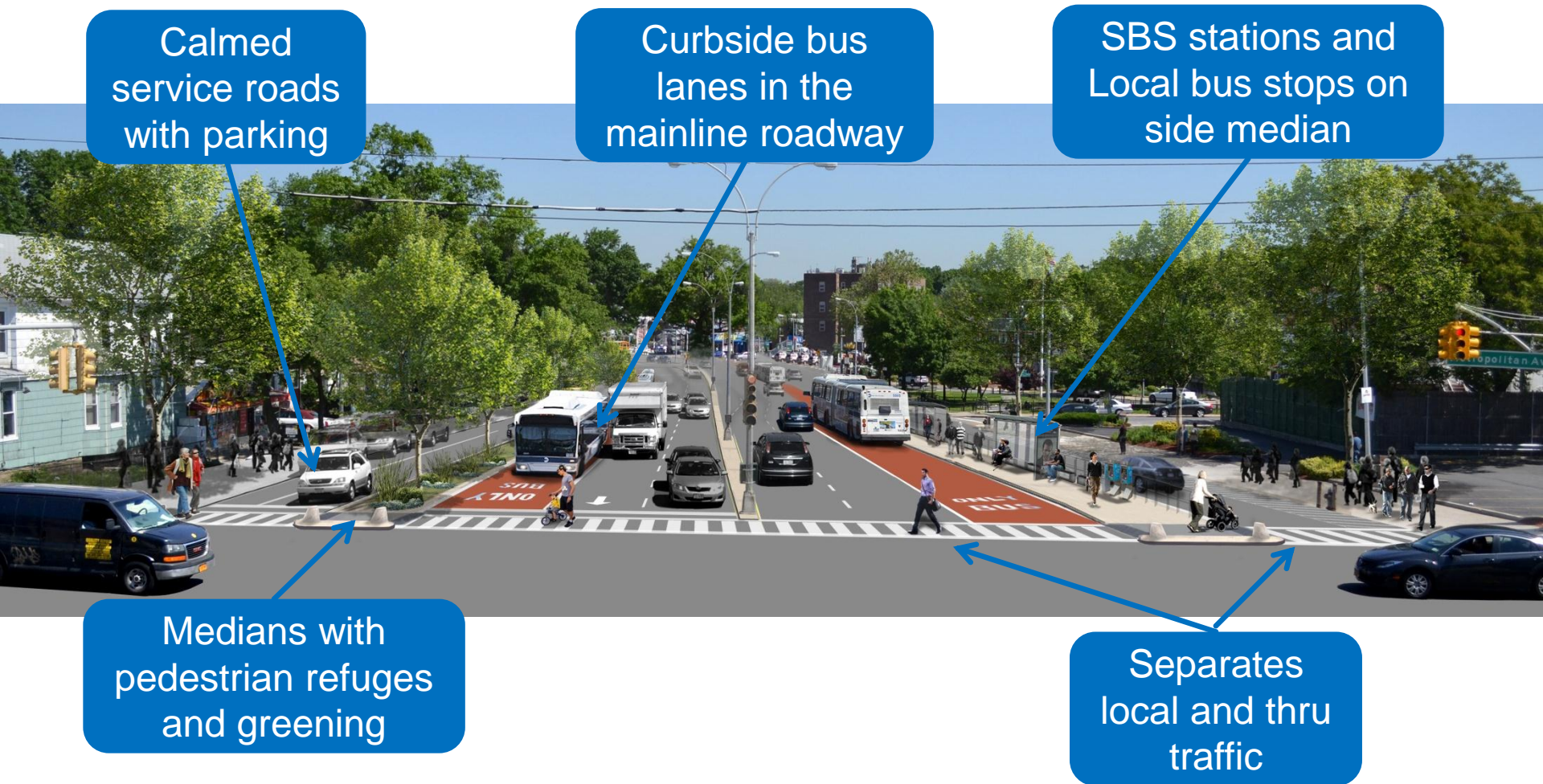


Long pedestrian
crossing distance
with no refuge

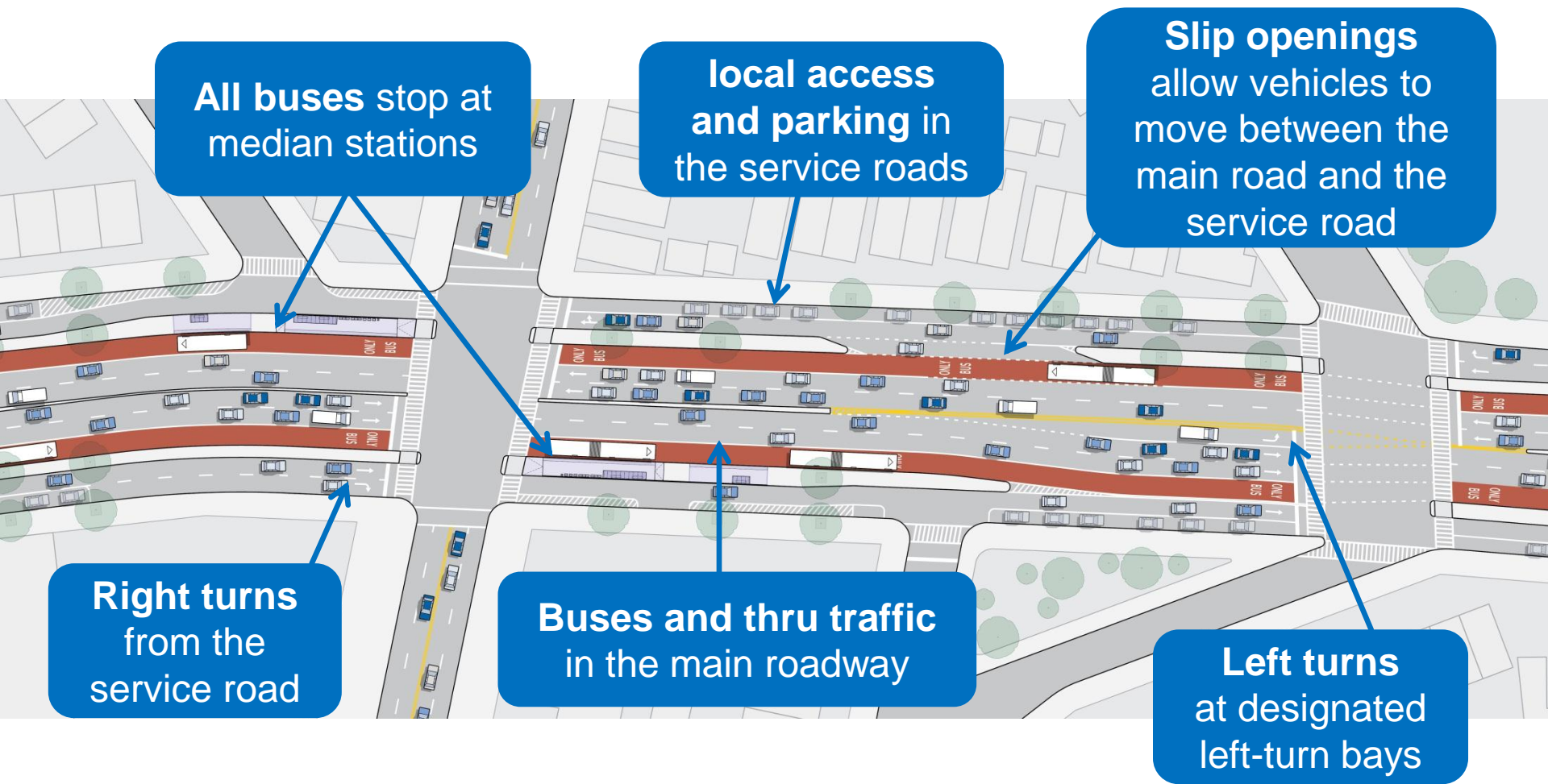
Left turns create
congestion and
safety issues

Wide roadway
encourages
speeding

Proposed design - Woodhaven Blvd

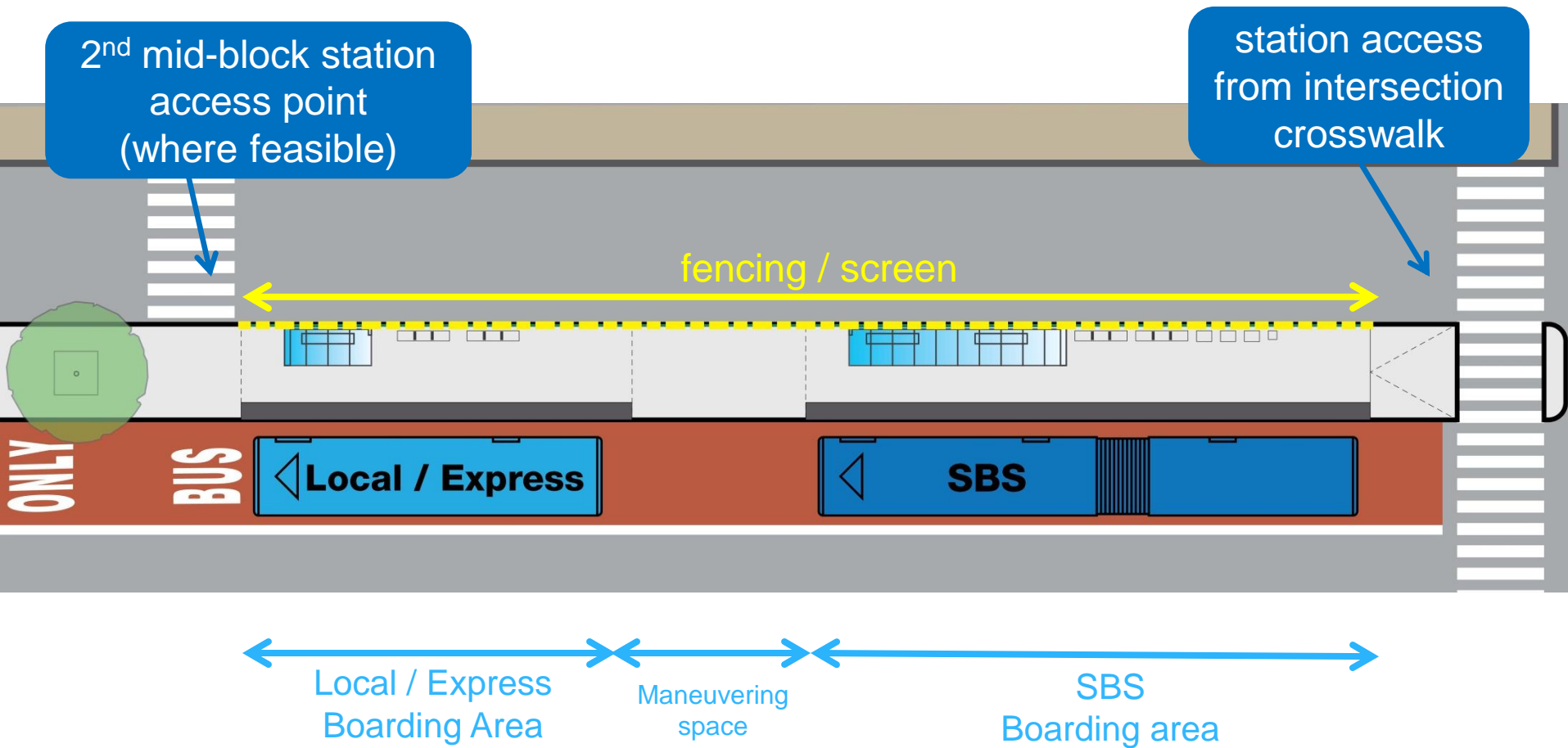


Proposed design - Woodhaven Blvd



Sample plan for illustrative purposes

Typical median station



Example median stations



Avinguda Diagonal, Barcelona, Spain



Pelham Parkway, Bronx



EL Grant Highway, Bronx

Potential station amenities



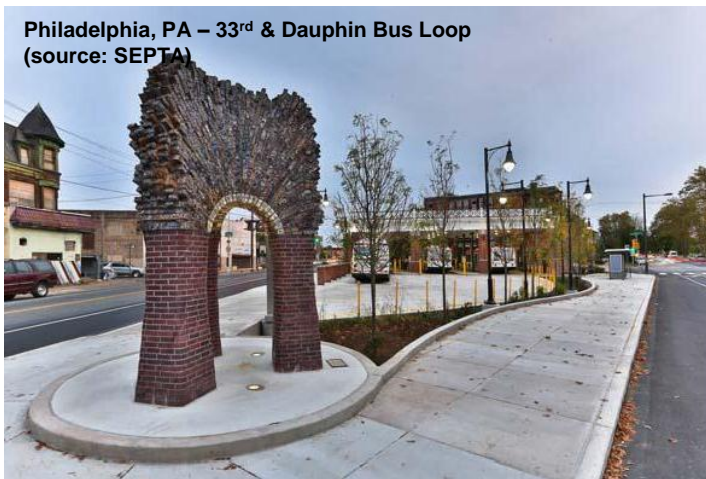
trees and greening



real-time information



benches and seating



Philadelphia, PA – 33rd & Dauphin Bus Loop
(source: SEPTA)

public art



San Bernardino, CA – Bus rapid transit station
(source: Architectural Record)

shelters / fencing / windscreens

Traffic analysis

Traffic analysis

- Analysis assumes all traffic that uses Woodhaven and Cross Bay Boulevards today will continue to do so (no assumed mode shift)
- Level of service and traffic delay calculations at all major intersections
- Traffic simulation model of Woodhaven Blvd between 68th Rd and 86th Rd



Proposed design - traffic benefits

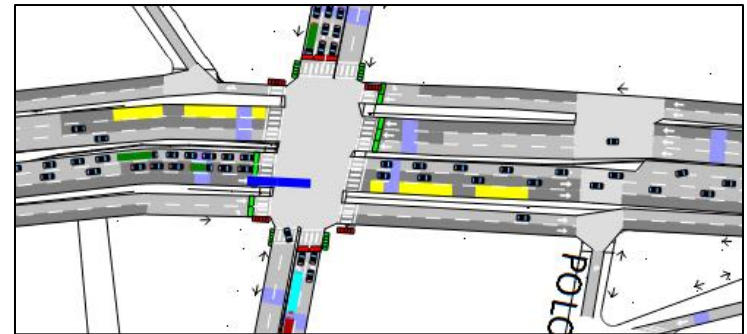
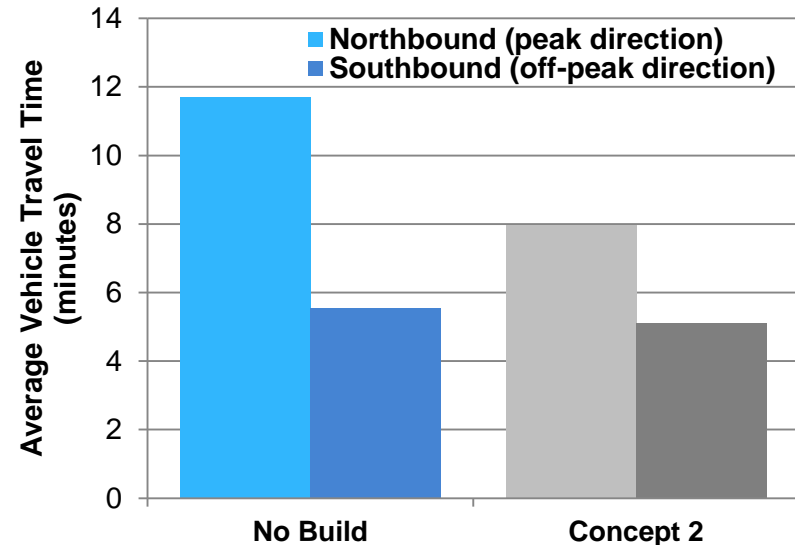
- 3 lanes continuously along corridor reduces merging/diverging behavior
- Banning key left turns (particularly Union Turnpike SB) helps thru traffic flow
- Longer left-turn bays where left turns are allowed keep turns out of through traffic
- More consistent roadway design allows for better traffic signal timing and coordination
- Service road design separates thru traffic from local access / parking

Traffic simulation model

- During the concept screening analysis, initial results showed improved travel times due to signal timing improvements and traffic organization
- Revised model is currently in development based on draft plans and community feedback

Simulation Model Results – AM Peak

Woodhaven Blvd from 68th Rd to 86th Rd



Screenshot of Woodhaven Blvd & Metropolitan Av
AM Peak Period from screening analysis

SBS Route and Stations

Proposed SBS Stations

Changes from the Q52/Q53 LTD stops:

- SBS stops at 91 Av instead of Atlantic Av
(local bus will still stop at Atlantic Av)
- New stop at 101 Av
- New stop at Pitkin Av
- Consolidated SBS stops in Broad Channel and the Rockaways



Bus stops in CB6



Fare collection

Q52/53 SBS

- Off-board fare collection
- Fare machines at every SBS stop
- Pay with a Metrocard or with coins (just like any NYC bus)
- Customers can board at any door



Local / Express Buses

- Pay on the bus (same as today)
- Will have separate bus stop poles from the Q52/53 SBS

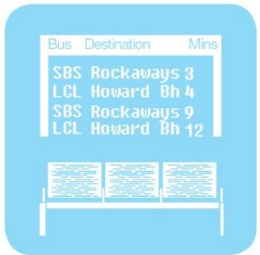


Project benefits

Project benefits



Faster bus service – bus only lanes and off-board fare collection will making riding the Q52/Q53 25-35% faster



Improved bus stops – new median bus stations and bus bulbs featuring shelters, seating, and real-time bus arrival signs



Better connections to the subway and other bus routes at key transfer points

Project benefits



Simpler, safer streets – new roadway design will organize local and thru traffic and shorten pedestrian crossings



Greener, resilient streets – New trees and medians add greening to the corridor and improve stormwater retention



Traffic flow – a consistent roadway design with improved traffic signal timing will reduce bottlenecks and create a more predictable driving experience

Next steps

- **Spring 2015:** Present draft plans at public design workshops and stakeholder meetings to get feedback
 - **Draft plans are available on the project website (nyc.gov/brt) for further comment**
- **Summer 2015:** Refine design plans based on community feedback and further technical review
- **Fall 2015:** Transfer project to NYC Dept. of Design and Construction for Final Design and engineering



Thank you!

