

## Agenda

Introductions

Nostrand Avenue / Rogers Avenue SBS Summary

CAC #2 Summary

**Existing Traffic Conditions** 

Street Design with Select Bus Service

Traffic Conditions with Select Bus Service

Improvement Options

**Group Discussions of Improvements** 

Recap and Next Steps



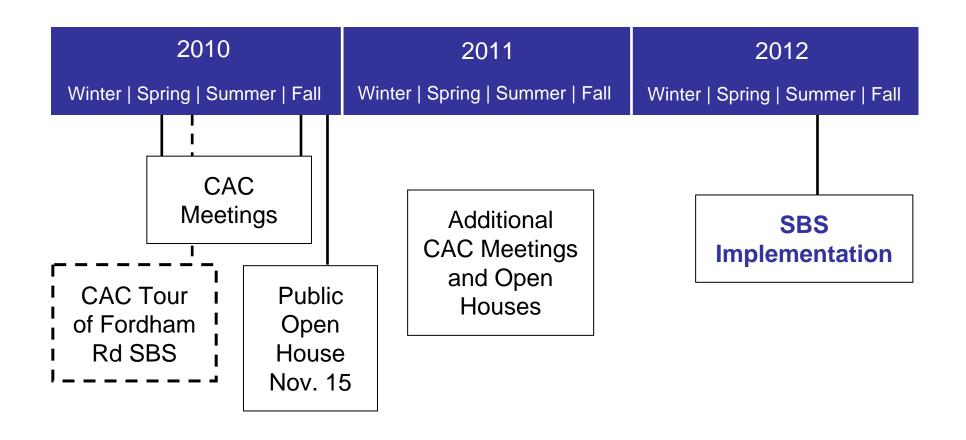


# Nostrand Avenue / Rogers Avenue SBS Summary





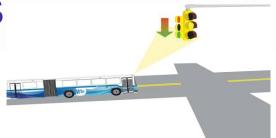
## Nostrand / Rogers SBS: Timeline







#### **SBS** Features



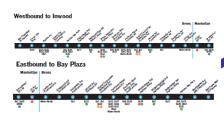
**Bus Lanes** 







**Pre-Payment** 



**Passenger Info** 



**Stations** 



**Branding** 





#### Fordham Road SBS

#### **Travel Time:**

20% reduction in running time

#### Ridership:

10% increase

#### **Customer Satisfaction:**

98% satisfied or very satisfied

#### **Tour of Fordham SBS**

Was held for Nostrand CAC members on June 17





# 1<sup>st</sup> and 2<sup>nd</sup> Avenues Select Bus Service

Service began October 10th on the M15 SBS

New buses have 3 doors, streamlined appearance, and quiet operation

Fare-prepayment

Curbside and offset bus lanes





# Nostrand SBS Project Features

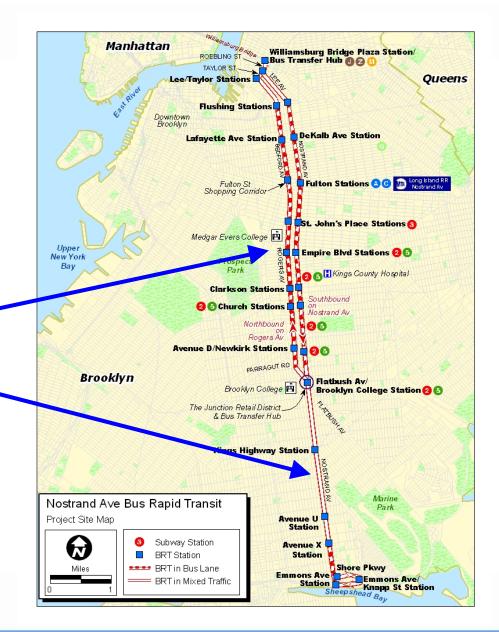
B44 Limited will become SBS; B44 Local will continue as before. SBS buses will have the same fare as the locals.

Offset bus lanes with bus bulbs at stations for 5 miles

Transit Signal Priority for 3.8 miles from Flatbush Avenue to Sheepshead Bay

#### For the Entire Route:

- New low-floor buses
- Next generation fare collection
- Branding of stations and buses







Community Advisory Committee # 2 April 26, 2010

Topic: Station Placement and Layout





#### Station Placement

Proposed Station Locations were Discussed

#### Stations Planned:

- At High Ridership Locations
- At Major Intersecting Bus Routes
- On Average 7/10 Mile Spacing

Multiple CAC members requested station at Ave D / Newkirk Ave, which has very high ridership. Station will be added.





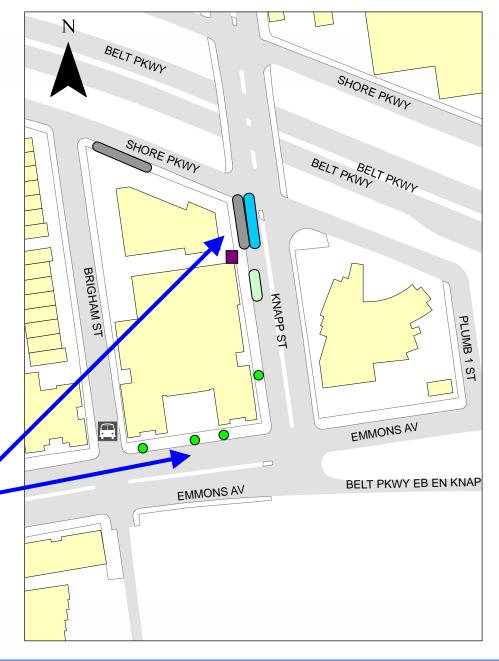


## **Station Layout**

The layout of each station was discussed.

CAC members noted where special conditions such as driveways or loading activity would affect station placement

CAC members requested the Knapp St station be moved around corner to Emmons Ave, which is being considered







# **Existing Traffic Conditions**





## Traffic Analysis Process

28 intersections were studied, at SBS stations and major cross streets where bus lanes are proposed.

#### Intersection Analysis Includes:

- Traffic Volumes
- Traffic Signal Timing
- Signal Progression
- Number of Travel Lanes
- Parking Movements
- Bus Stops





# **Traffic Congestion**

Congestion is often found approaching major cross streets

Truck double parking while loading creates congestion









#### Free-flow Traffic

Curbs cleared at rush hours can help traffic flow

Between major cross streets and with no double-parking, traffic can move quickly







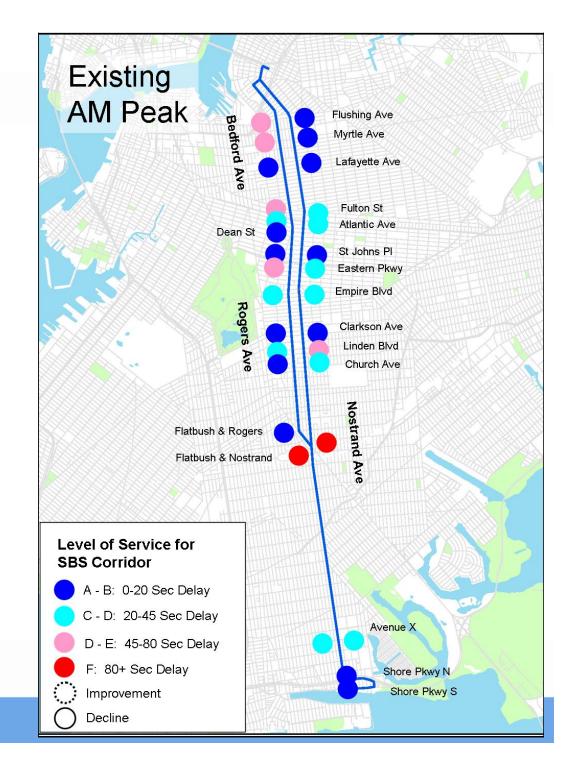


# Existing Morning Peak

Congestion on Bedford Ave approaching Williamsburg Bridge and BQE

Congestion at major intersections such as Eastern Pkwy, Linden Blvd, and Flatbush Ave

Outside these locations and on most of Nostrand, traffic usually moves well

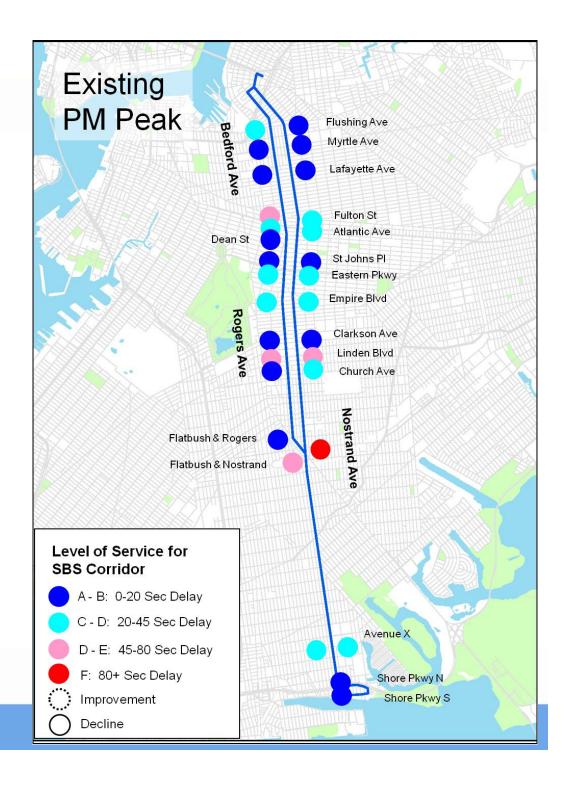




# Existing<br/>Evening Peak

Congestion at major intersections such as Fulton St, Linden Blvd, and Flatbush Ave

Outside these locations, traffic usually moves at a reasonable pace



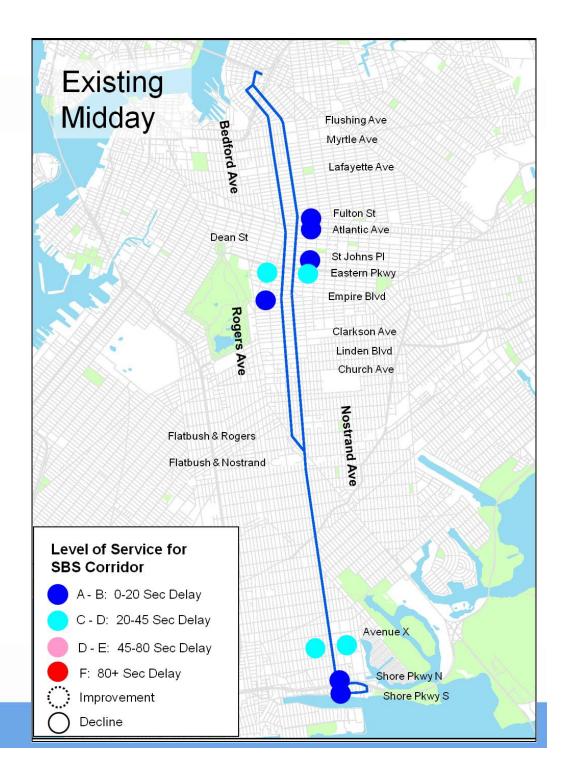


## **Existing Midday**

Smaller set of intersections studied, but they represent typical conditions

Some congestion at major intersection – Eastern Pkwy

Generally traffic moves well





# Street Designs and Traffic Conditions with Select Bus Service



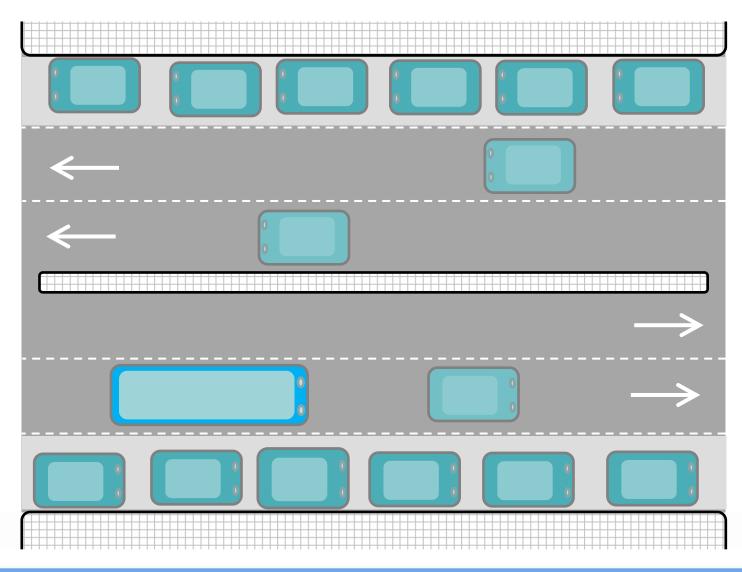


### Nostrand Ave, Ave X to Emmons





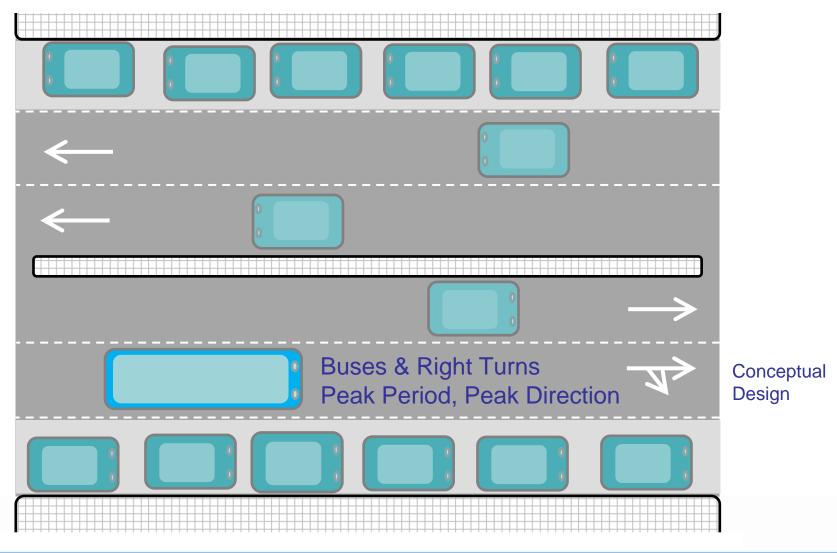
### Existing Nostrand Ave, Ave X to Emmons







# Nostrand Ave, Ave X to Emmons with SBS Peak Period

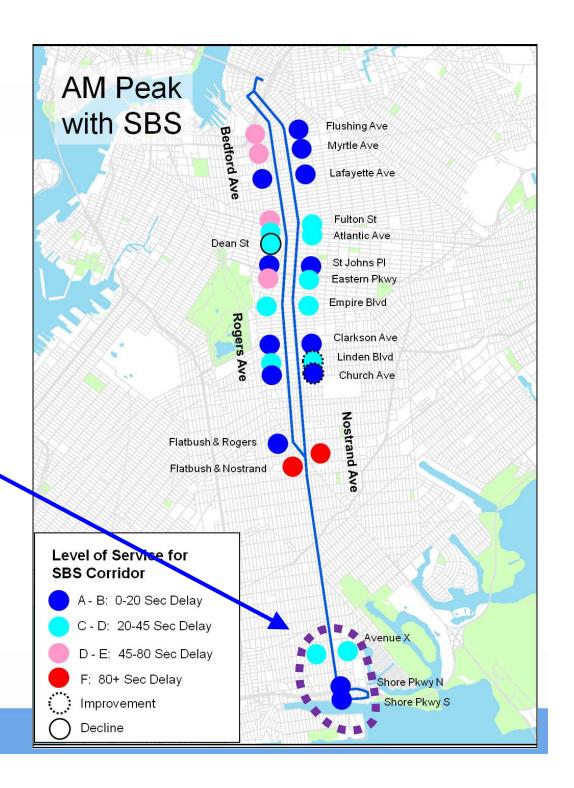






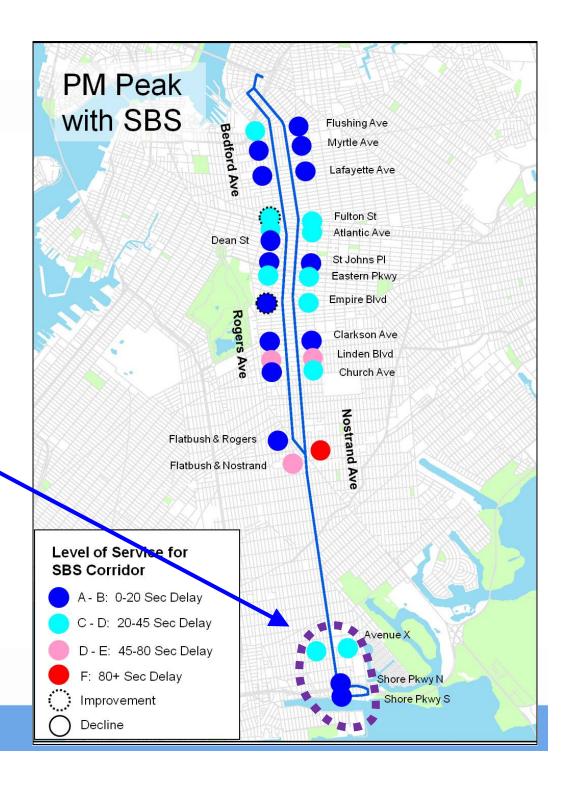
# Morning Peak with SBS

Low traffic on southern Nostrand means little change with bus lane



# Evening Peak with SBS

Low traffic on southern Nostrand means little change with bus lane





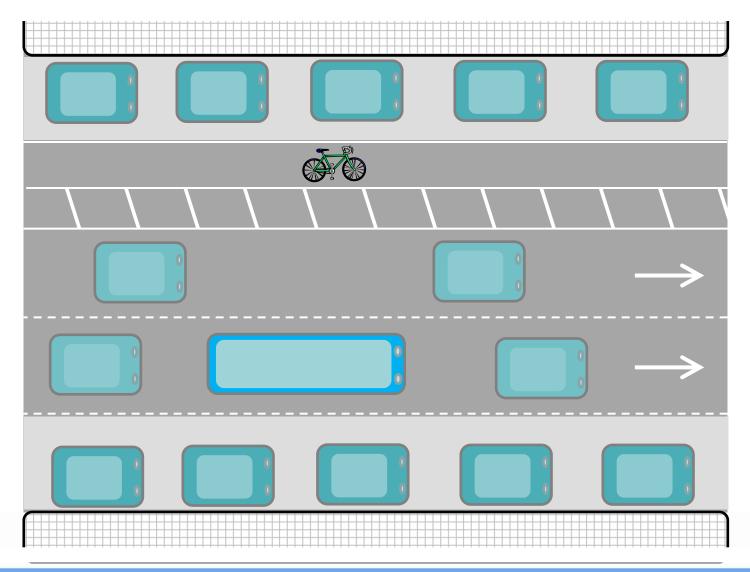
# Bedford Ave, — Dean to DeKalb







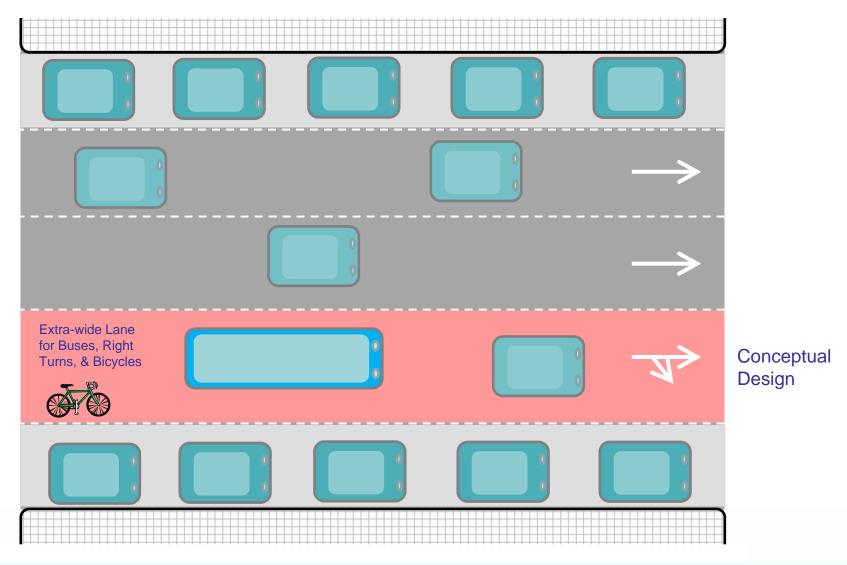
### Existing Bedford Avenue, Dean to DeKalb







#### Bedford Avenue, Dean to DeKalb with SBS

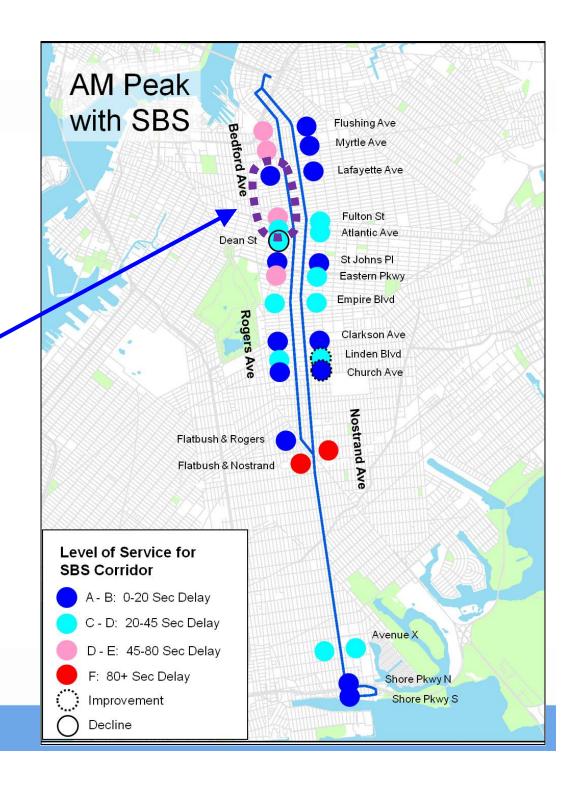






# Morning Peak with SBS

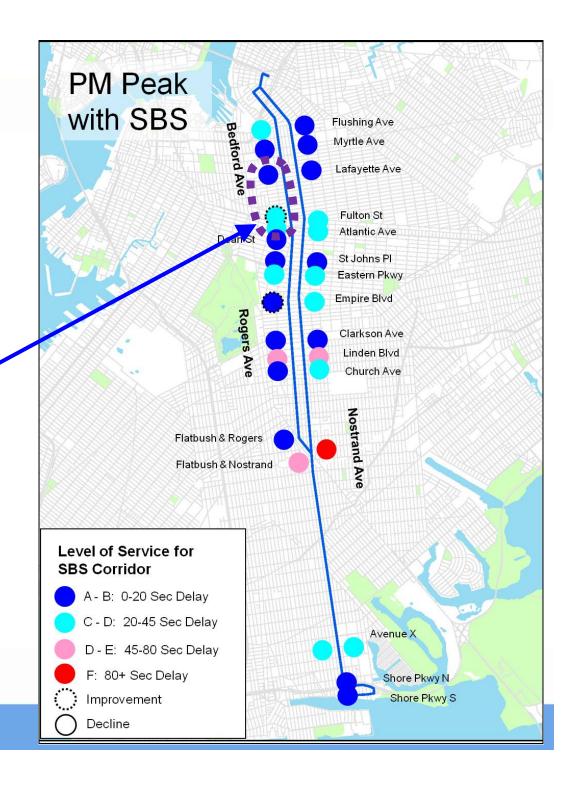
Traffic generally will not change because 2 general traffic lanes maintained



# Evening Peak with SBS

Traffic generally will not change because 2 general traffic lanes maintained

Traffic more free-flowing on Bedford at Fulton, because right turns shift to bus lane

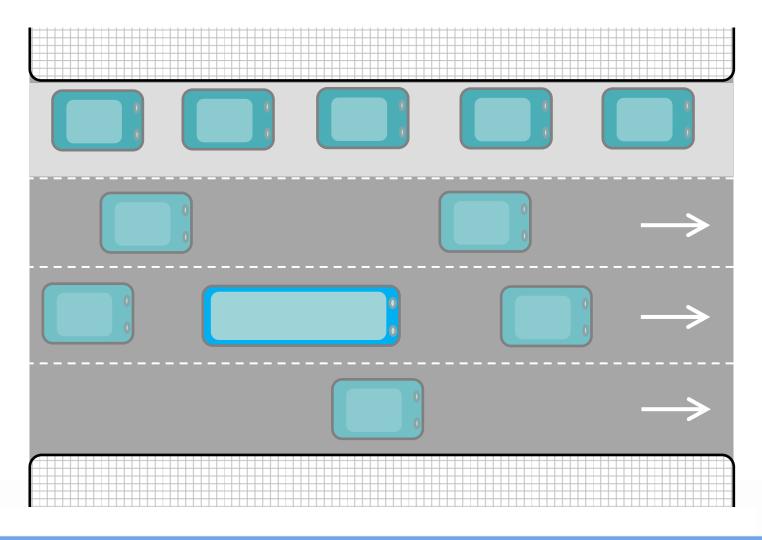


# Rogers Ave and Upper — Nostrand Ave





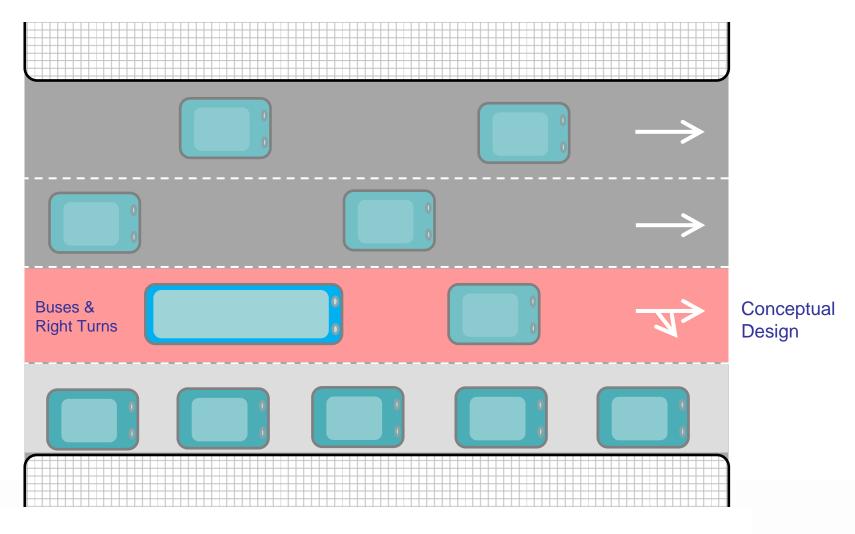
# Existing Upper Nostrand and Rogers, Peak Direction







# Upper Nostrand and Rogers with SBS AM and PM Peak





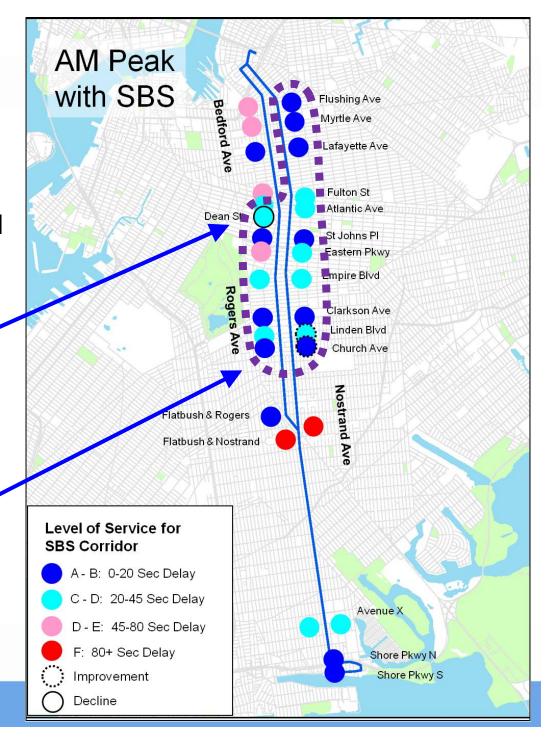


# Morning Peak with SBS

Northbound traffic generally will not change due to left curb travel lane

Traffic slightly slower on Rogers at Dean, because curb through lane becomes bus & right lane

Traffic faster on Nostrand at Linden and Church, because of new curb travel lane

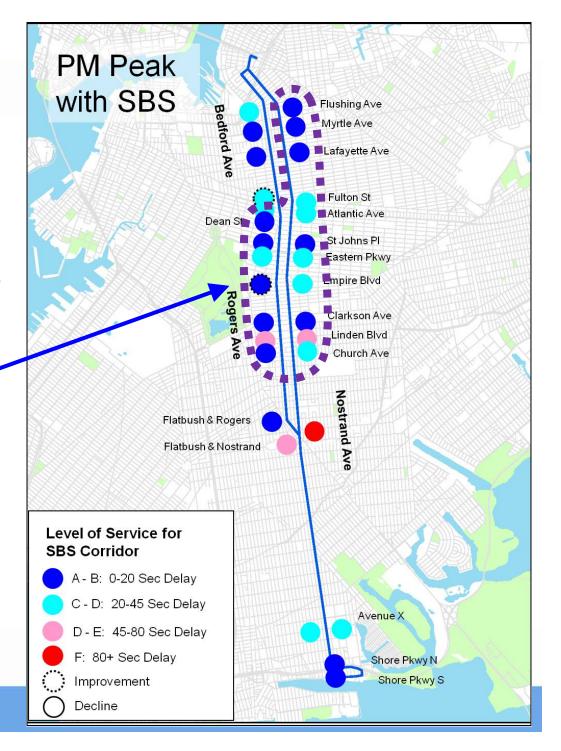




# Evening Peak with SBS

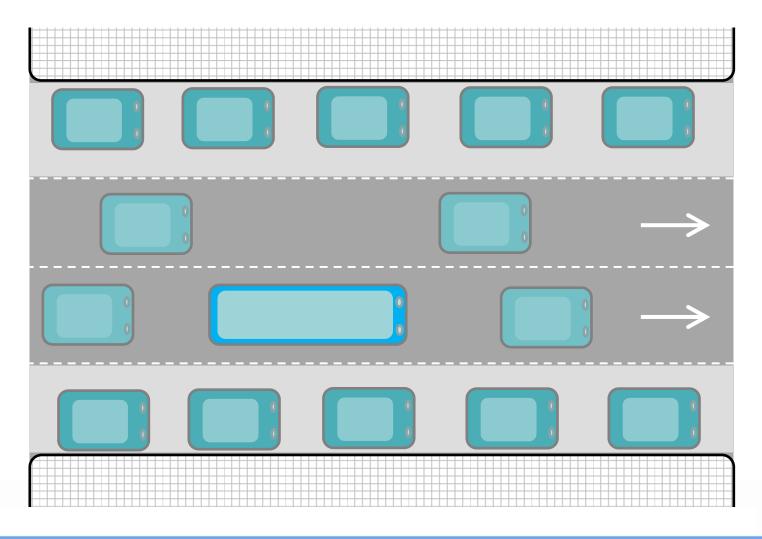
Southbound traffic generally will not change due to the left curb travel lane

Traffic more free-flowing on Rogers at Empire due to off-peak curb travel lane





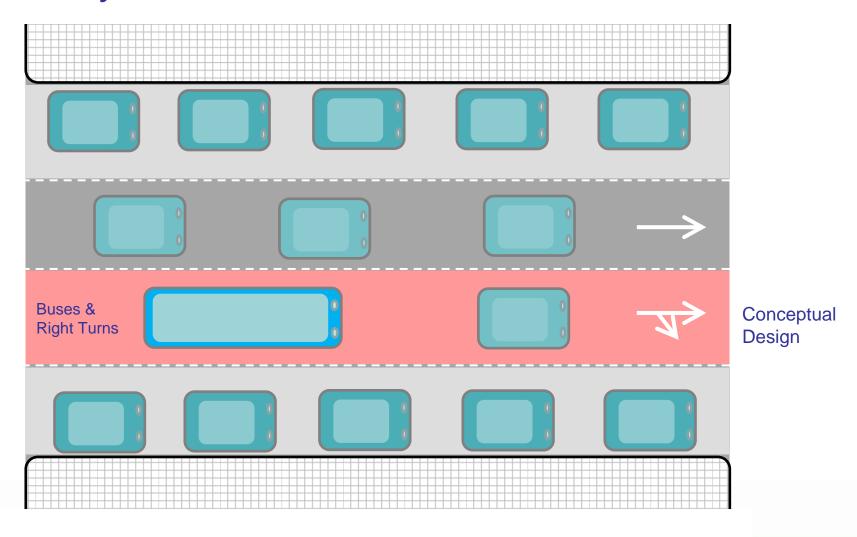
# Existing Upper Nostrand and Rogers, Off-Peak Direction and Midday







# Upper Nostrand and Rogers with SBS Midday





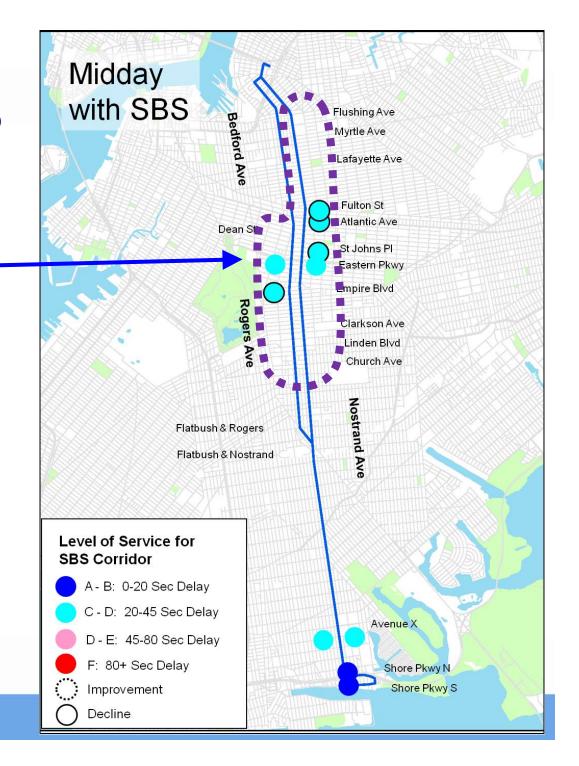


## Midday with SBS

Slower traffic on upper
Nostrand and Rogers
because through and left
traffic uses one lane, so
that parking is preserved

No change on Bedford or southern Nostrand

Traffic would improve significantly with small changes at major intersections





# Improvement Options





# Signal Timing

"Green time" for the project corridor can be increased to improve traffic flow, while cross street gets less

Most useful where cross street traffic is not congested





#### **Curb Travel Lanes**

Parking can be changed to a travel lane on the block before a major intersection

Useful in midday when parking would normally be on both sides of street





# **Delivery Zones**

Truck loading zones can keep curb clear for store deliveries

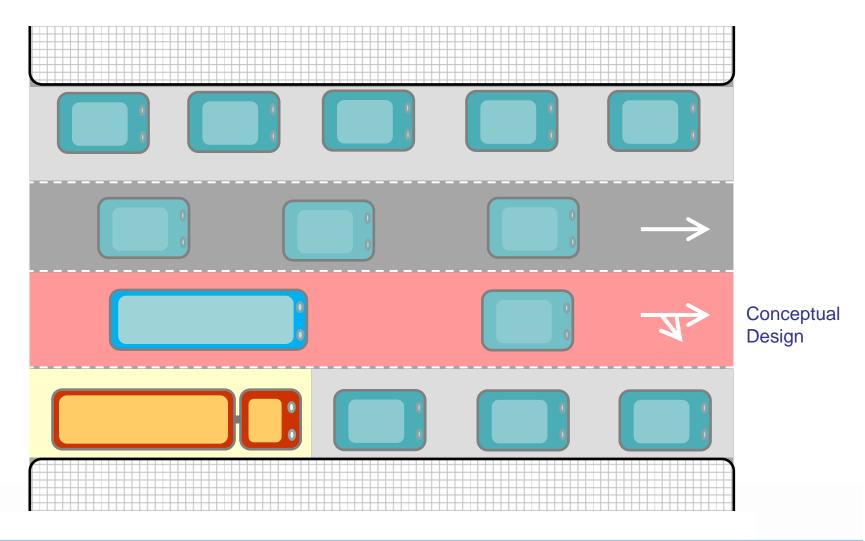
With trucks using curb instead of double-parking, travel lanes are kept open

Options include time of day and location





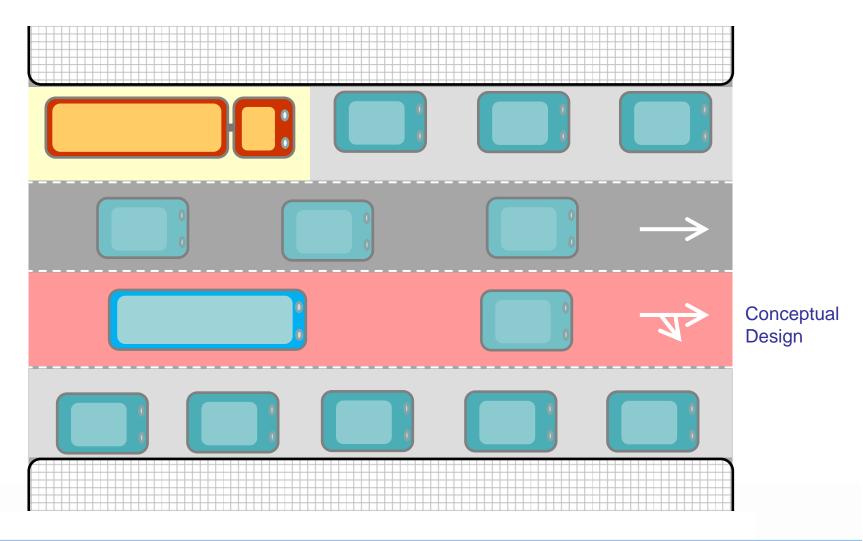
## 7 AM to 7 PM Delivery Zones on Right Curb







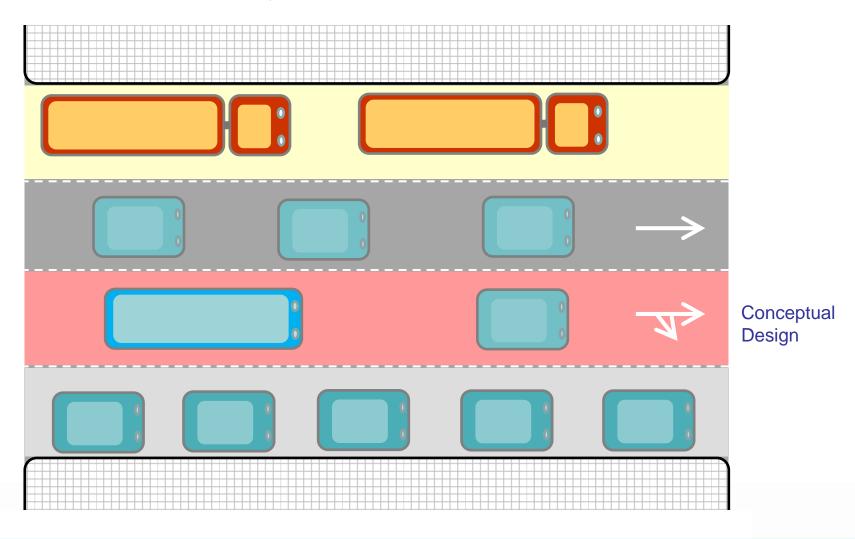
# Delivery Zones on Left or Right Curb, 10 AM to 4 PM







# Delivery "Windows" on Either Curb, 10 AM to Noon, or Noon to 2 PM







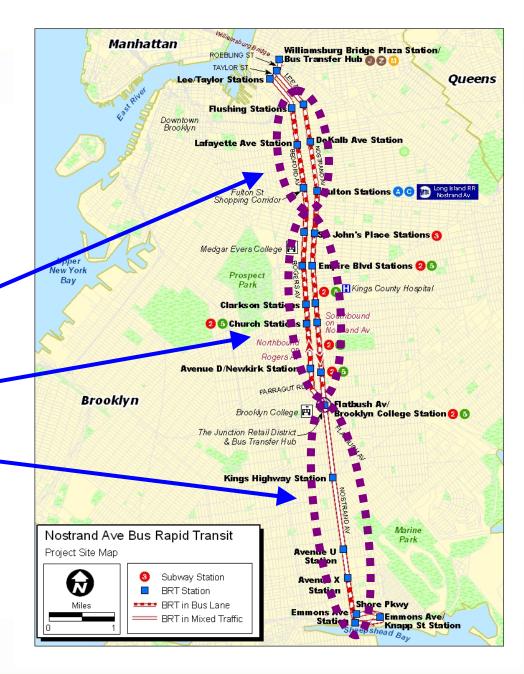
# Group Discussions of Improvements

#### **Groups**:

Flushing to Atlantic

Atlantic to Flatbush

Flatbush to Emmons







#### Next Steps

- Public Open House November 15<sup>th</sup>
- Final Design 2011
- Additional Community Advisory Committee Meetings and Open Houses
- Start of Service 2012





#### **Questions and Answers**



