

Agenda

- Project background
- Corridor design
- Traffic analysis
 - 5 minute Q&A break
- Bus service planning
 - 5 minute Q&A break
- Next steps
- Q&A / Small group discussions



SBS Corridors

June 2008 Fordham Rd (Bx12)

Oct 2010 1st/2nd Ave (M15)

Nov 2011 34th St (M34/34A)

Sept 2012 Hylan Blvd (S79)

2013 Nostrand Ave (B44)

2013/14 Webster Ave (Bx41)

2013/14 LaGuardia Airport (M60)



SBS Results

Speed: 15-20% faster

Ridership: 5-10% increase in first year

Customer Satisfaction: over 95% satisfied or very satisfied

Safety: 1st and 2nd Avenues saw a 21% reduction in traffic

injuries in sections with full design treatments









The Webster Avenue corridor

- Based on the existing Bx41 route that carries over 22,000 daily riders
- 5.3 miles from The Hub to Williamsbridge
- Within a 10-minute walk of the corridor:
 - 200,000 residents
 - 71% of households do not own a car
 - 61% of residents commute by transit



Project goals



1. Speed buses and improve reliability



2. Improve safety for all corridor users



3. Support community needs



CAC meetings recap







Meeting #1 February 6, 2012

- Project introduction
- Identification of issues and opportunities along the corridor

Meeting #2 May 2, 2012

- Corridor data analysis
- Three corridor design ideas

Meeting #3 September 27, 2012

- Introduction to corridor offset bus lane design
- Design ideas for specific areas along the corridor

SBS Overview

- Bx41 LTD → 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

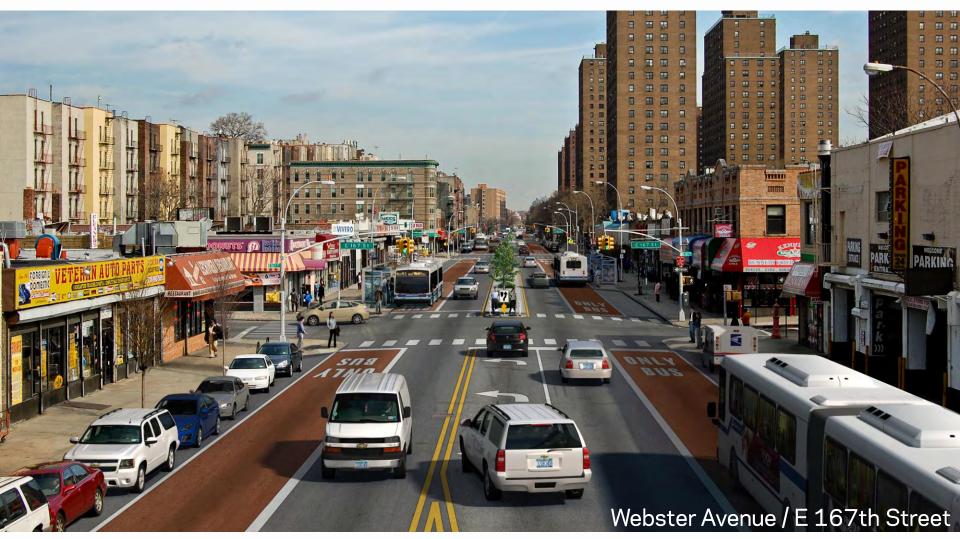


Existing conditions





Proposed design





Proposed design





Benefits of proposed design



- 1. Offset bus lanes improve bus speed
- 2. Bus bulbs allow for high-quality SBS stations
- 3. Maintains curbside access and parking



Benefits of proposed design



- 4. Curb extensions and medians improve pedestrian safety
- 5. Addresses speeding and vehicle safety issues
- 6. Maintains appropriate traffic flows and circulation



SBS Bus Stations - Bus Bulbs



Example: M15 SBS, 1st Ave/1st St Station





SBS Bus Stations - Curbside

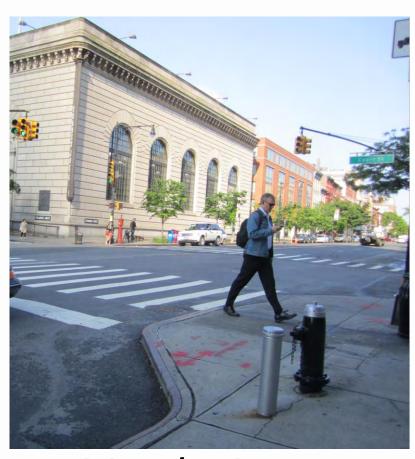


Example: Bx12 SBS, Fordham Rd / Webster Av Station

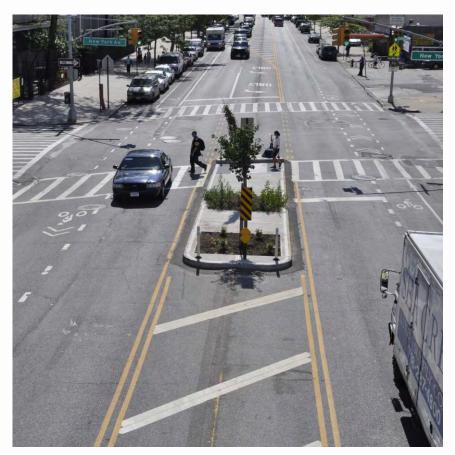




Pedestrian safety elements



Neckdown / curb extension



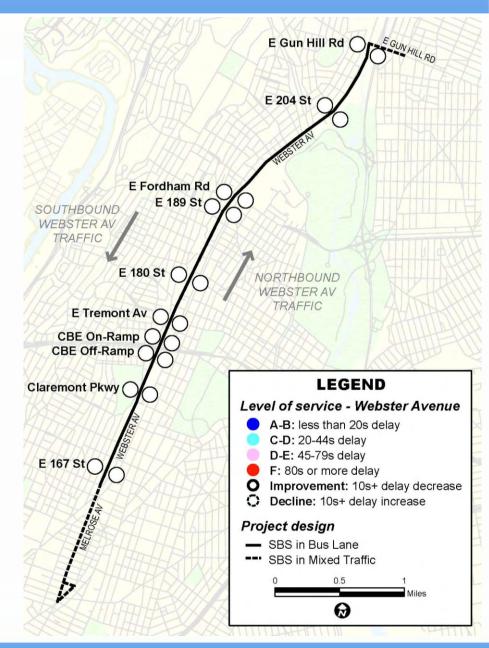
Pedestrian refuge / Median





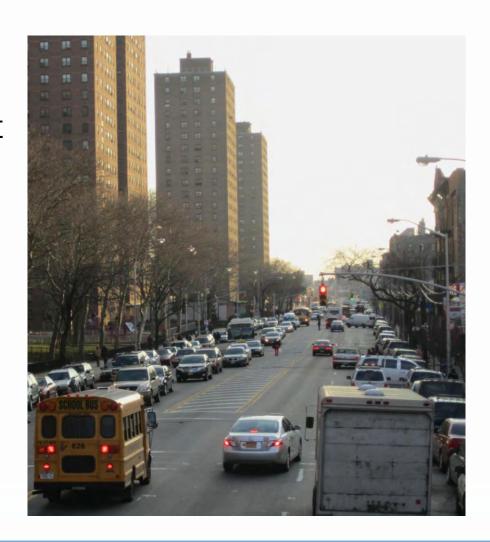
Traffic analysis process

- Studied 10
 intersections along
 the section of the
 corridor with
 proposed bus lanes
- AM and PM Peak
- Focus on the busiest intersections along the corridor

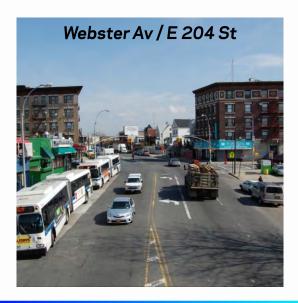


Traffic analysis process

- Intersection design and signal timing determine the capacity of the street
- Analysis inputs:
 - Traffic volumes
 - Traffic signal timing and progression
 - Number of lanes
 - Curb activity
- Analysis Output:
 - Average delay per vehicle
 - "Level of Service" (LOS) grade (A thru F)



Vehicle delay / Level of Service







LOS A - B

- Light traffic
- Cars clear intersection quickly

LOSC-D

- Moderate traffic
- Typical amount of delay for NYC

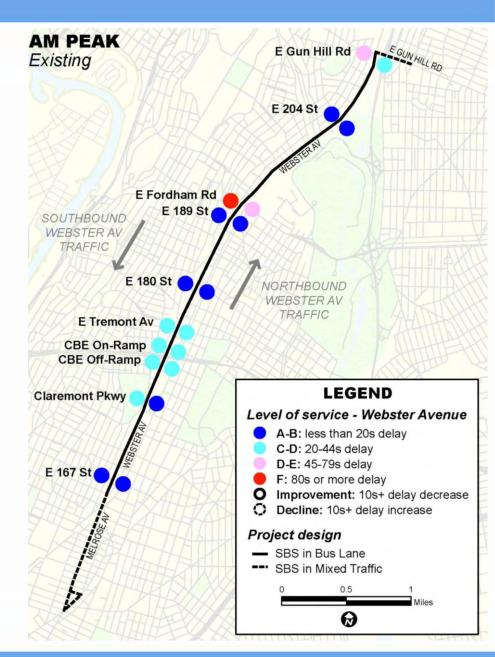
LOSE-F

- Heavy traffic
- Cars may wait more than one green light to clear intersection



Existing Traffic Conditions

- Overall, corridor moves very well
- Congestion at selected intersections
 - E Fordham Rd
 - E Gun Hill Rd
 - Cross Bronx Expressway



Webster Ave SBS traffic changes

Capacity reductions

Replace one general travel lane with a bus lane in each direction

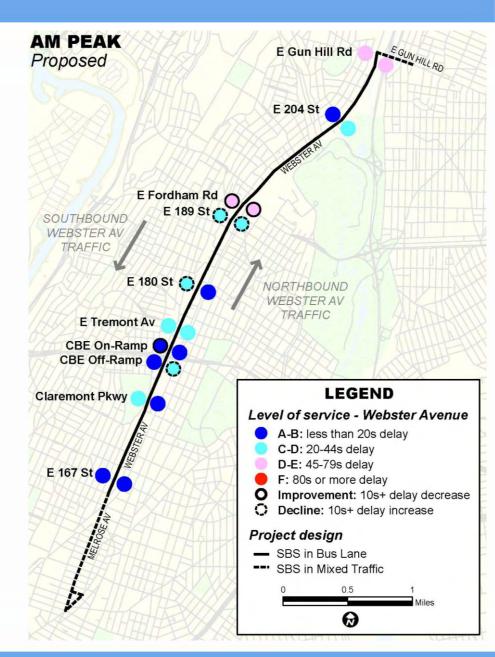
Capacity improvements

- Right-turn bays reduce blockages at busy intersections
- Lengthening left-turn bays creates more storage space
- Banning left-turns reduces conflicts and opens up additional signal time for other congested movements
- More signal time for key thru or left-turning movements
- Updated curb regulations and offset bus lanes reduce double parking



Projected Traffic Conditions

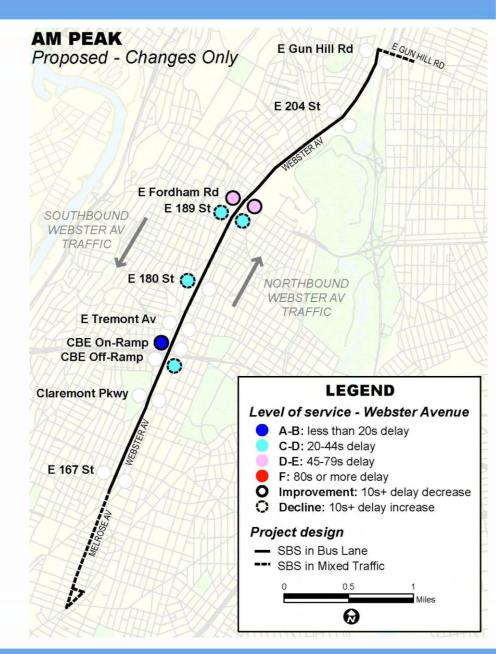
- Small changes along the majority of the corridor
- Overall traffic levels are still very good
- Improvements at major intersections
 - E Fordham Rd
 - Cross Bronx Expressway



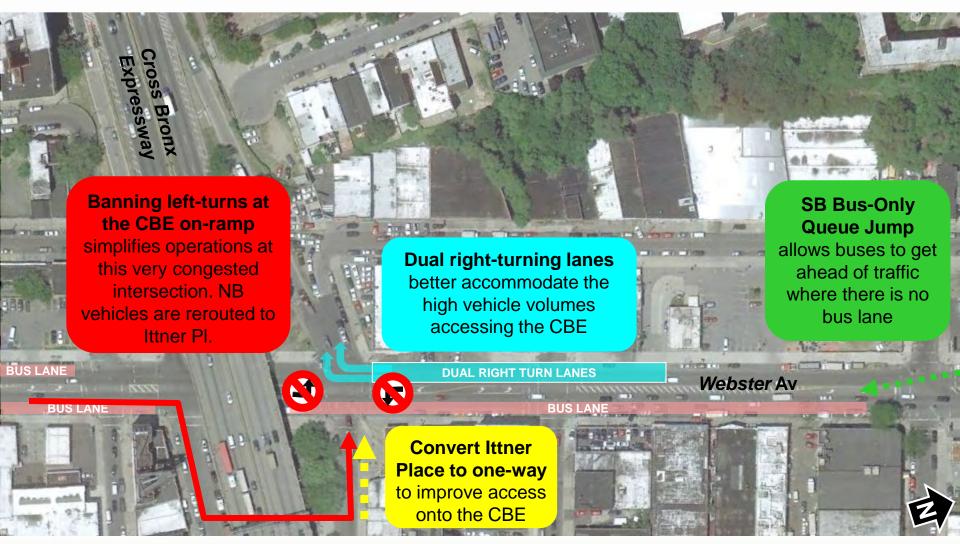


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 - E Fordham Rd
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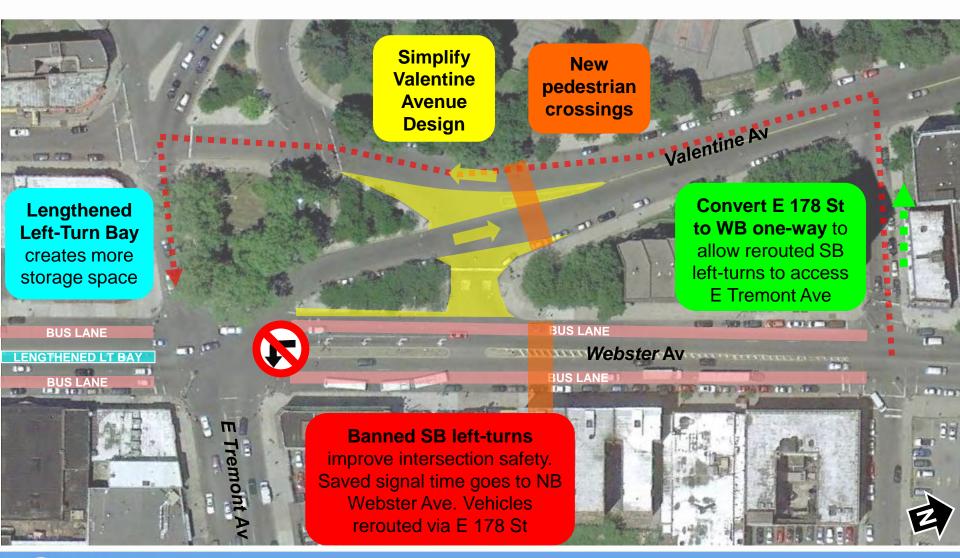
Cross Bronx Expressway





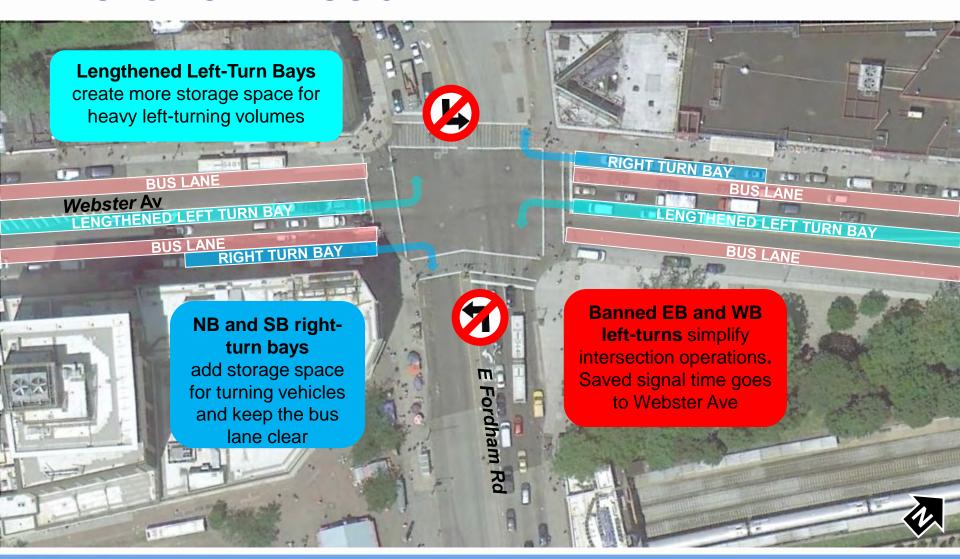


E Tremont Avenue



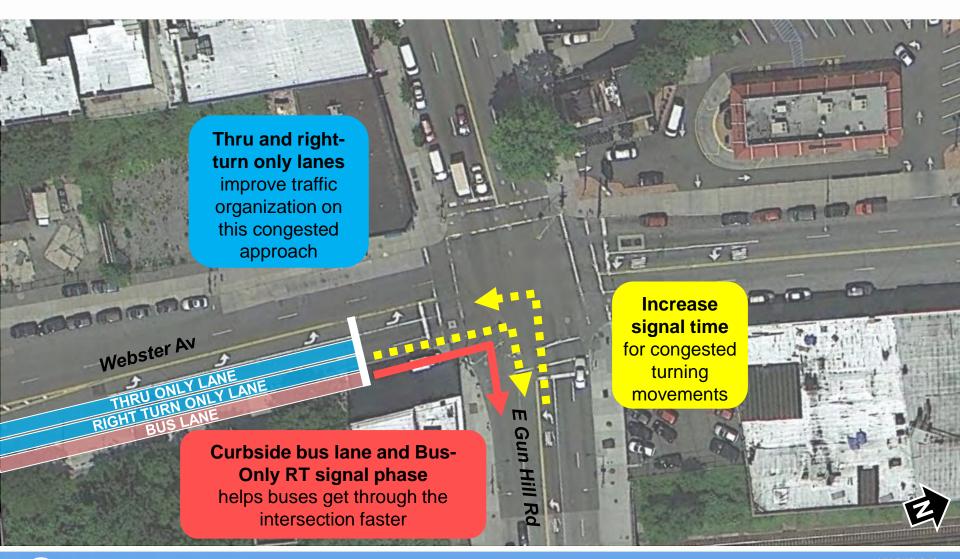


Fordham Road

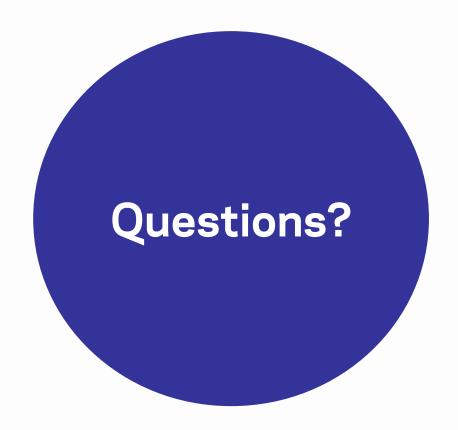




E Gun Hill Road









Existing bus services

Webster Avenue

- 1. Bx41 LTD
- 2. Bx41 Local
- 3. Bx55 (Limited) north of Fordham Plaza

Third Avenue

- 1. Bx15 (Local)
- 2. Bx55 (Limited)

Bainbridge / Valentine Avenues

1. Bx34 (Local)





Proposed bus services

Webster Avenue

- 1. Bx41 LTD Bx41 SBS
- 2. Bx41 Local
- 3. Bx55 (Limited) north of Fordham Plaza
- 4. SBS to LaGuardia Airport

Third Avenue

- 1. Bx15 (Local)
- 2. Bx55 (Limited) Bx15 LTD

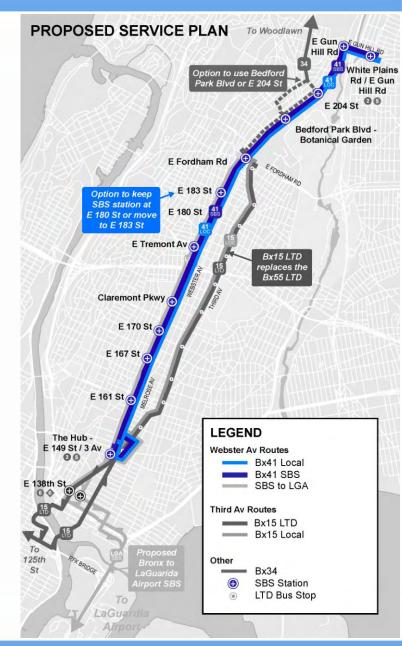
Bainbridge / Valentine Avenues

1. Bx34 (Local) Rerouted



Webster Avenue

- Bx41 LTD → Bx41 SBS
 - 1/2 mile stop spacing
 - Service will run frequently all day
- Bx41 Local
 - No change to stop spacing
 - Service every ~10 minutes
- Off board fare collection (like the Bx12 SBS on Fordham Road)





Third Avenue

Bx15 Local

- Replaces the Bx55 route (weekday only) with an all times route
- Local stops:
 The Hub ↔ Fordham Plaza

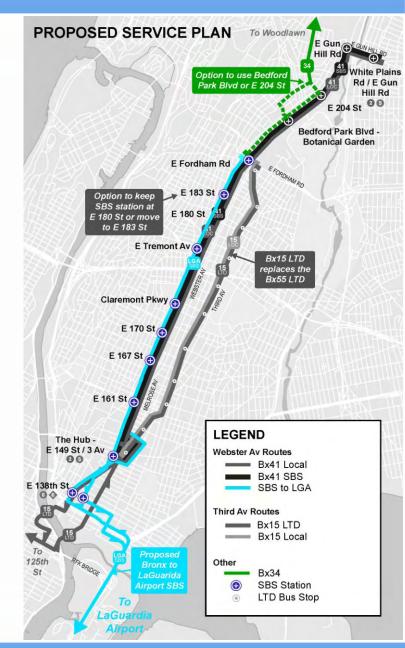
Bx15 LTD

- Local stops:
 Harlem 125th St ↔ The Hub
- Limited stops:
 The Hub ↔ Fordham Plaza
- No Third Avenue bus service north of Fordham Plaza



Other bus services

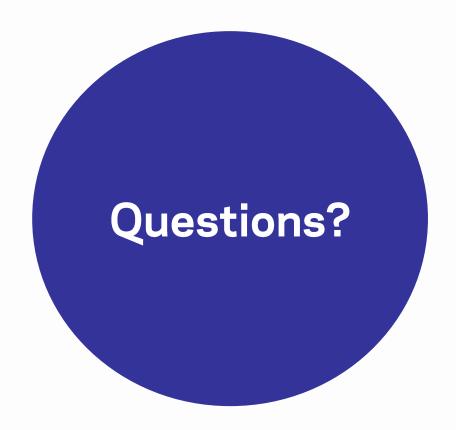
- SBS to LaGuardia
 Airport
 - Off board fare collection
 - Same stops as Bx41 SBS north of The Hub
 - Connects to 6 train
- Reroute the southern portion of the Bx34 route to Webster Avenue





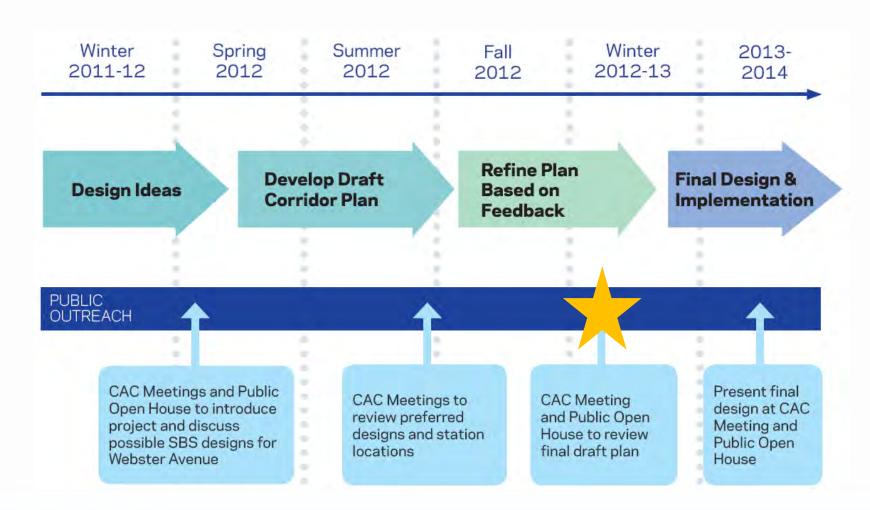








Project timeline





Next steps

Winter 2012/13

- Technical Advisory Committee meeting with other relevant city agencies
- Public Open House #2 January 2013
- Finalize plan based on public feedback
- Finalize traffic and environmental analysis
- Continue development of curb regulation plan
- Present to Community Boards along the project corridor to discuss specific designs



