



Sheridan Expressway Hunts Point Land Use and Transportation Study

Community Working Group

May 10, 2012

Agenda

- Overview of Traffic Screening Analysis
- Analysis Results
- Next Steps

Traffic Screening Analysis

Purpose:

Evaluate the viability of each scenario based on existing and proposed transportation network conditions

Components:

- Assess macro-level traffic impacts of each scenario
 - Trucks/cars on local streets
 - Added traffic on expressways due to re-routing
- Review network congestion at critical impacted intersections
- Assess delays due to re-routing

No-Build (Baseline) Scenario	
Screening Criteria	Baseline Assumptions
Local Street Traffic	Redevelopment related growth
Travel Time	Minimal change on Sheridan Expressway
Intersection Performance	Bruckner bottleneck remains; No Oak Point Ramps
Truck Routing	Trucks to Hunts Point continue to exit at Whitlock



No-Build (Baseline) Scenario:

- Local traffic continues to increase
- Work postponed on the Bruckner-Sheridan Interchange, Oak Point Ramps and Bruckner Expressway
- Truck traffic flow through Whitlock Avenue remains
- Travel time and congestion continues to increase
- Community goals for development of open space and accessibility are not met

Retain Scenario	
Screening Criteria	Impact
Local Street Traffic	Some improvement due to Oak Point Ramps
Travel Time	Decrease due to Bruckner-Sheridan interchange reconstruction
Intersection Performance	Minimal change
Truck Routing	Trucks move from Whitlock to Oak Point Ramps



Retain Scenario:

- Maintain the Sheridan Expressway connectivity for local and pass-through traffic
- Construct exit and entrance ramps at Oak Point for truck access directly from the Bruckner Expressway
- Reconstruct the Bruckner Interchange to improve congestion

Modify Scenario	
Screening Criteria	Impact
Local Street Traffic	Some improvement due to Oak Point Ramps; Better connectivity in area surrounding the Sheridan
Travel Time	Decrease due to Bruckner-Sheridan interchange reconstruction
Intersection Performance	Minimal change
Truck Routing	Trucks move from Whitlock to Oak Point Ramps



Modify Scenario:

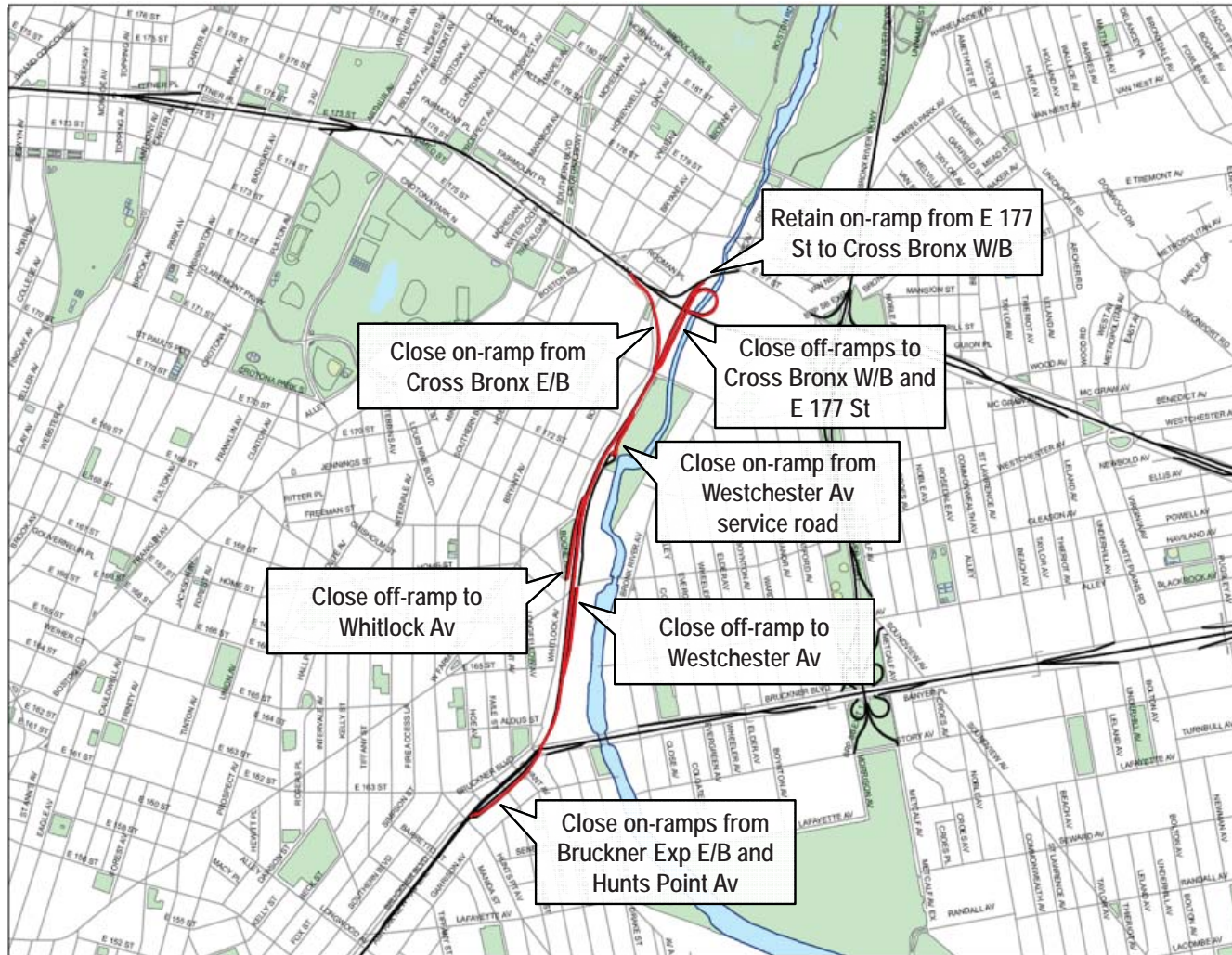
- Maintain the Sheridan Expressway connectivity for local and pass-through traffic
- Construct exit and entrance ramps at Oak Point for truck access directly from the Bruckner Expressway
- Reconstruct the Bruckner Interchange to reduce congestion
- Adjust the footprint of the Sheridan Expressway to better match the roadway's capacity to traffic demand
- Utilize surplus land for development and open space
- Provide neighborhood access across the roadway to adjacent parks and the Bronx River

Remove Scenario	
Screening Criteria	Impact
Local Street Traffic	Trucks and cars re-routed to local streets
Travel Time	Re-routing leads to some travel time increases
Intersection Performance	Major issues at several intersections
Truck Routing	Trucks re-routed to surface streets

Remove Scenario:

- Remove the Sheridan Expressway completely
- Trucks accessing Hunts Point peninsula re-routed
- Utilize surplus land for development, open space
- Reconstruct Bruckner-Sheridan Interchange to reduce congestion
- Construct Oak Point ramps for truck access directly from the Bruckner Expressway

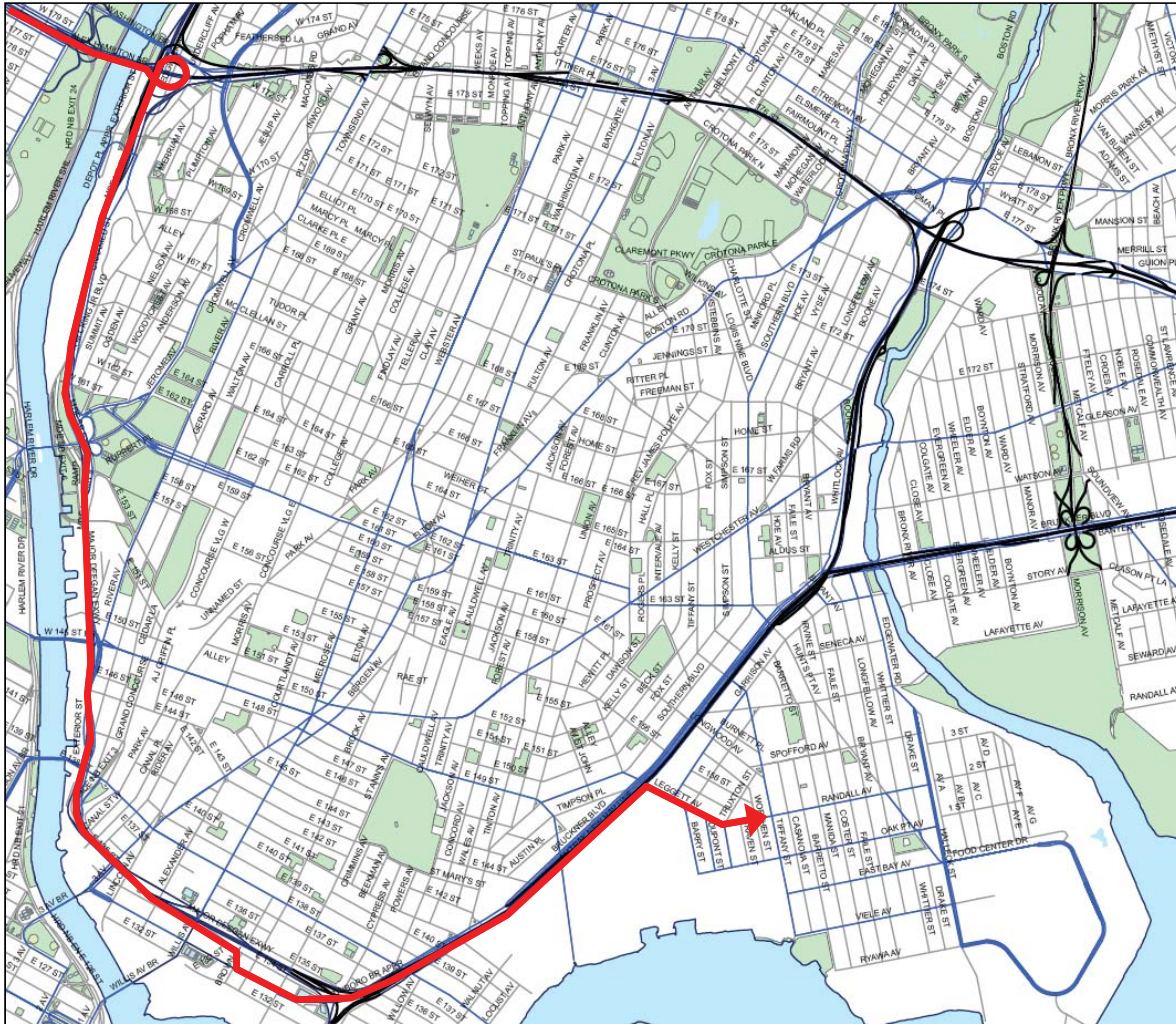
The Remove Scenario



Remove Scenario:

- Remove the Sheridan Expressway completely
- Trucks accessing Hunts Point peninsula re-routed
- Utilize surplus land for development, open space
- Reconstruct Bruckner-Sheridan Interchange to reduce congestion
- Construct Oak Point ramps for truck access directly from the Bruckner Expressway

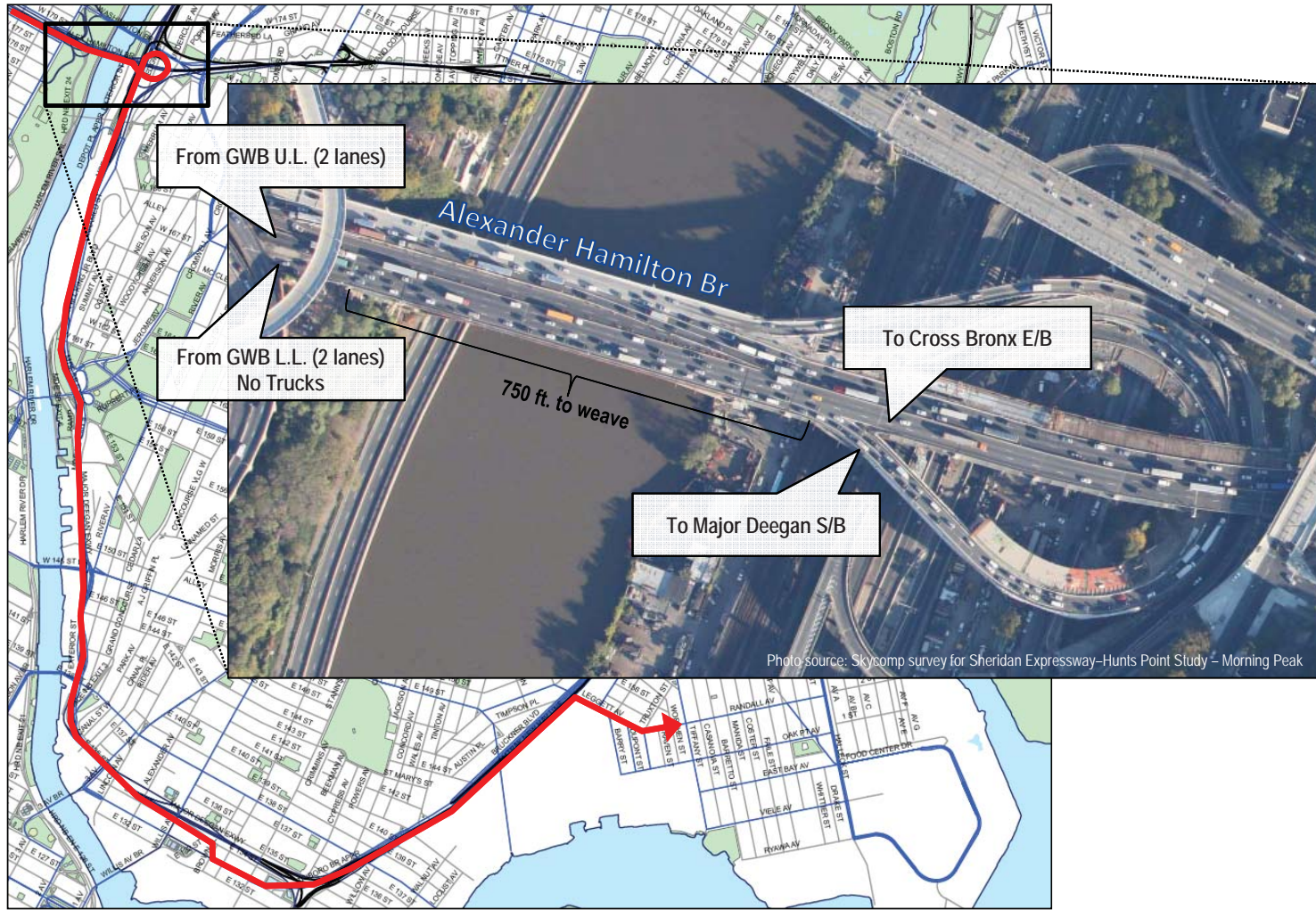
Truck Routing: To Hunts Point via the Major Deegan



Route Overview:

Trucks from the George Washington Bridge (GWB) must use the upper level which feeds the inner two lanes on the Alexander Hamilton Bridge (AHB). To access the Major Deegan southbound, they must weave across on the AHB to the helix ramp.

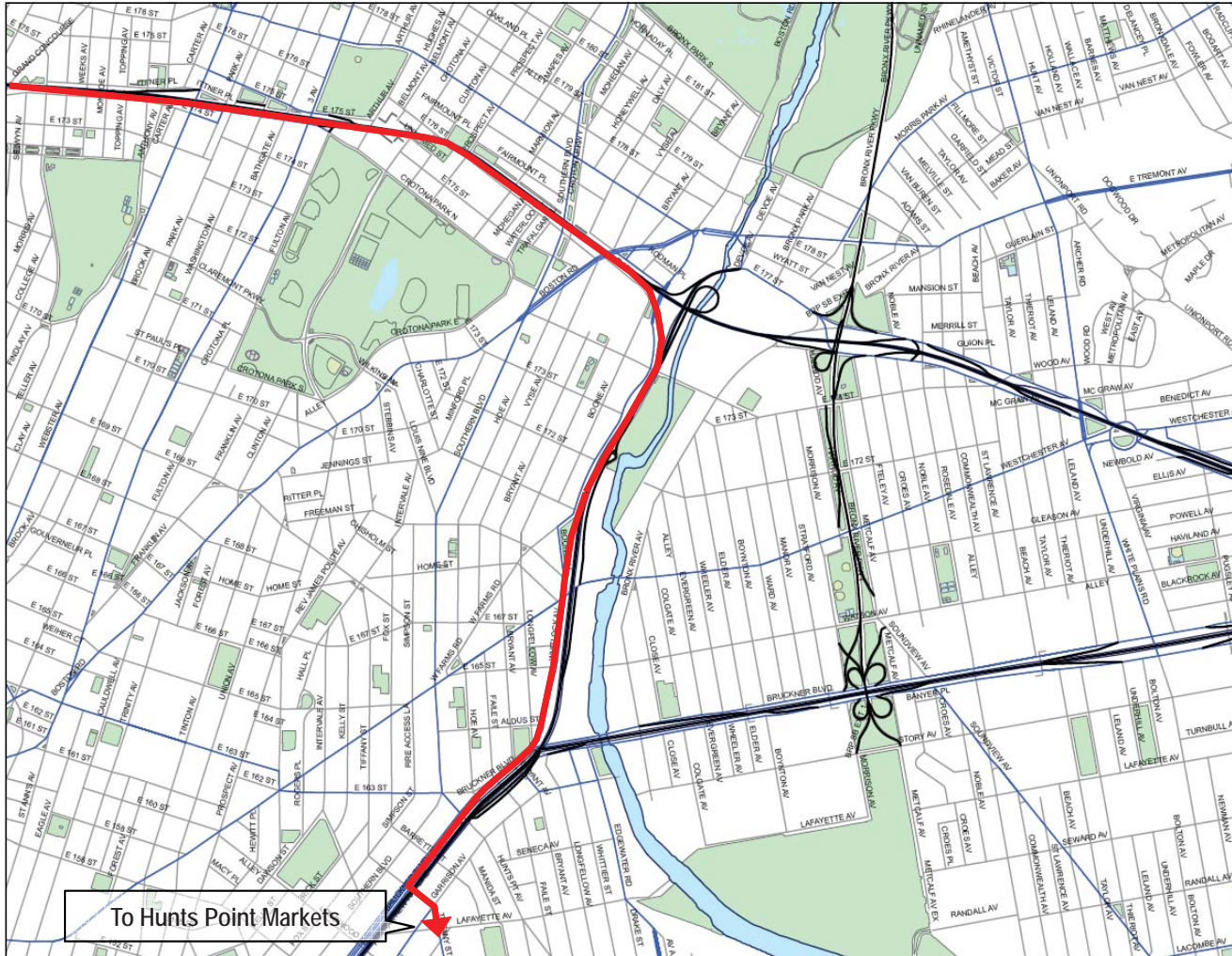
Truck Routing: To Hunts Point via the Major Deegan



AHB Close-up:

The weaving section is about 750 feet long, and due to tight turn of the helix, traffic is slow and densely spaced leaving few available gaps for trucks. Most trucks to Hunts Point, instead, prefer to stay on I-95 eastbound and travel to the Sheridan.

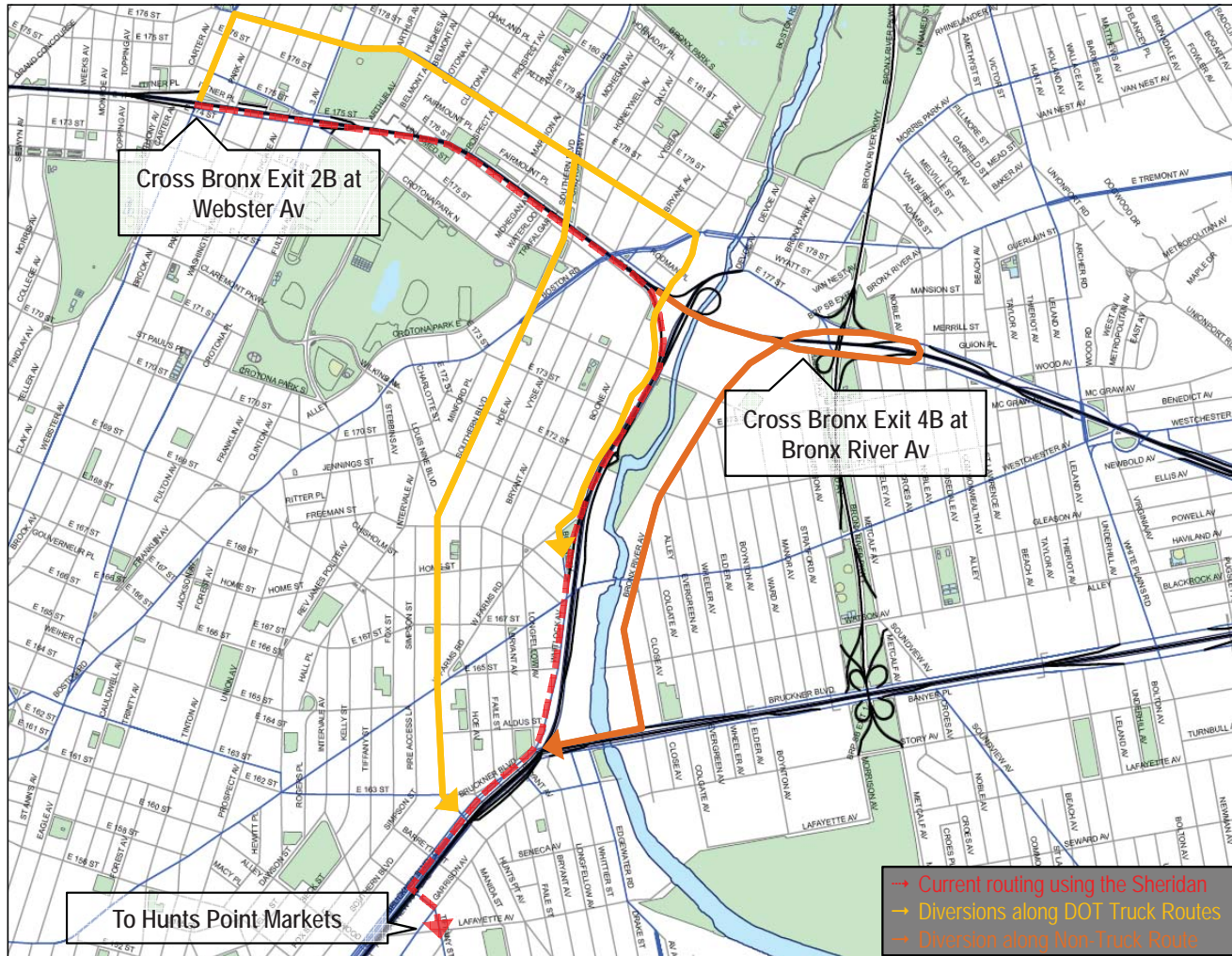
Truck Routing: To Hunts Point via the Sheridan



Route Overview:

Trucks to Hunts Point use the Sheridan, exiting at Whitlock Av and use local roadways designated as truck routes (Whitlock Av, Bruckner Blvd, Tiffany St and Leggett Av) to access the peninsula.

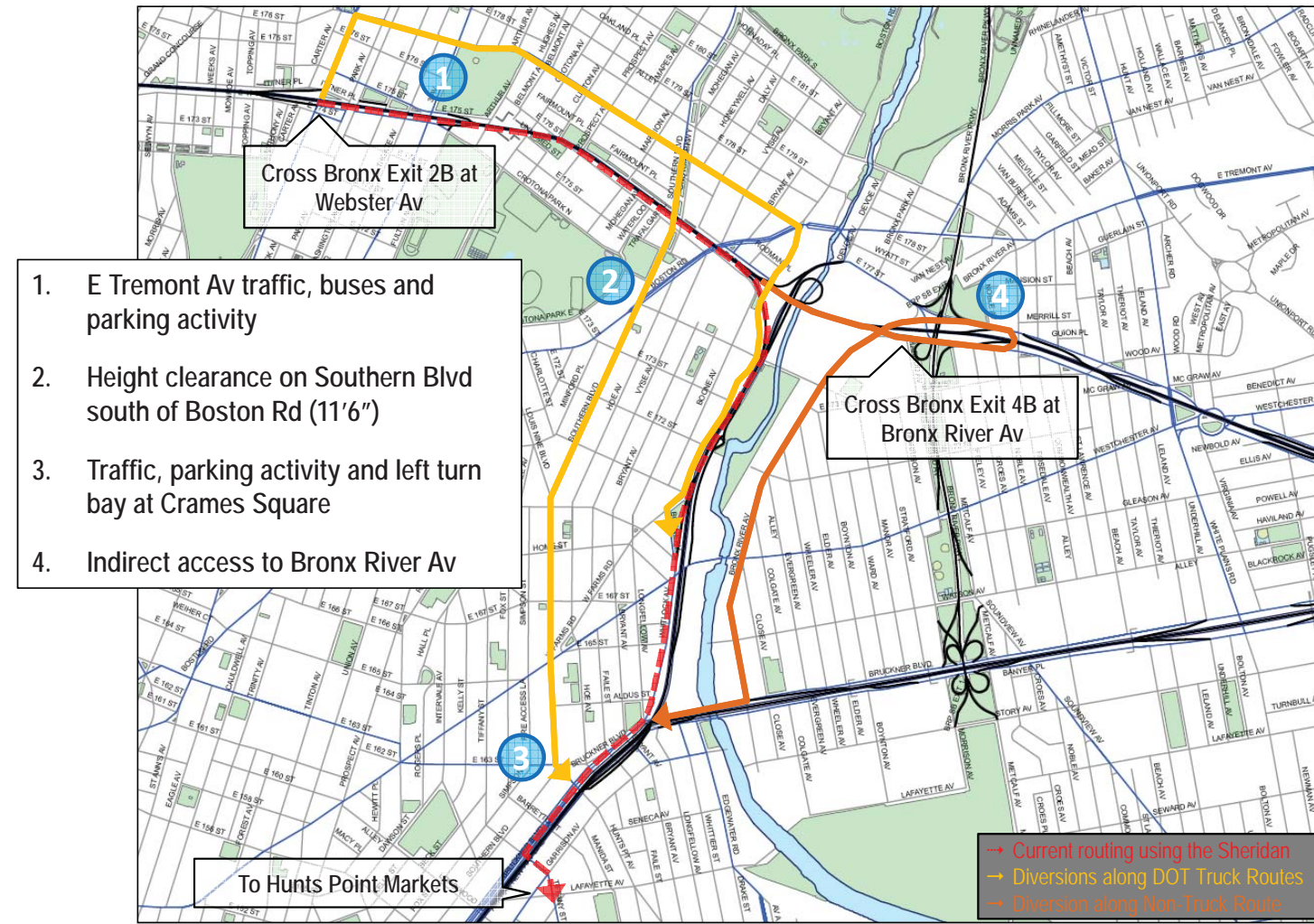
Truck Rerouting: To Hunts Point from Cross Bronx



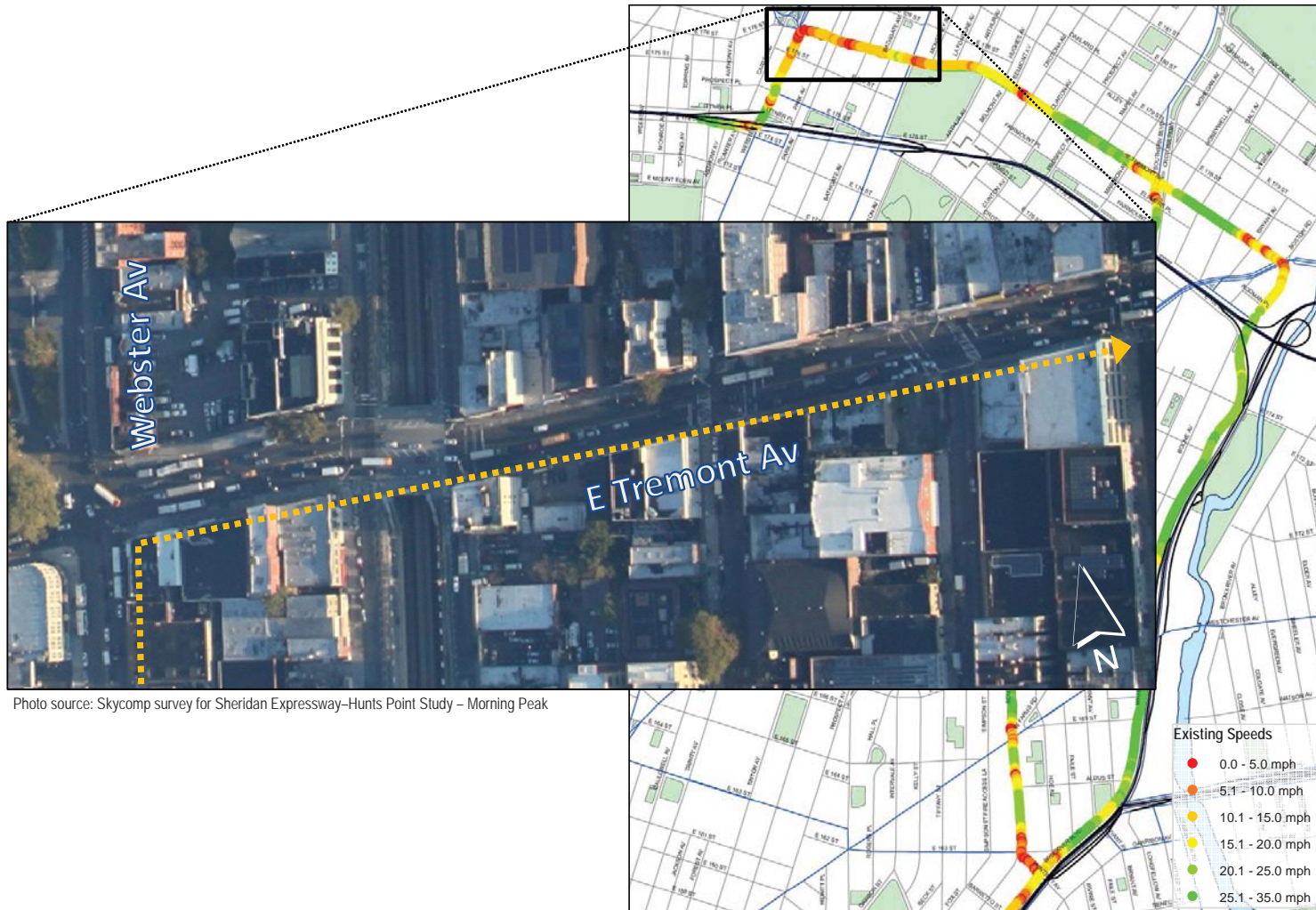
For these trucks on I-95 and the Sheridan, alternative trucks routes include:

- Southern Blvd and West Farms Rd, though the most direct exit on I-95 to access these routes is at Webster Av.
- Bronx River Av also provides access from the next I-95 exit, but the roadway is not designated as a truck route and the route is circuitous.
- Note about other route option: Webster Av to 163 St – trucks would still need to exit the Cross Bronx at Webster Av. Webster Av (particularly Claremont Parkway to 167 St section) and E 163 St have congestion pockets similar to E Tremont Av Southern Blvd route. There is also a height clearance concern at intersection of 163 St with Westchester Av.

Truck Rerouting: To Hunts Point from Cross Bronx



E Tremont Av – Webster Av



- E Tremont includes a mix of autos, commercial vehicles and transit bus activity. Parking and commercial curbside access, double parking/ stopping, and pedestrians also slow traffic flow.
- Note about speeds: yellow through red are indicative of congested areas. Smaller, isolated areas of yellow through red are typical at signalized or stop-controlled intersections.

E Tremont Av – West Farms Rd

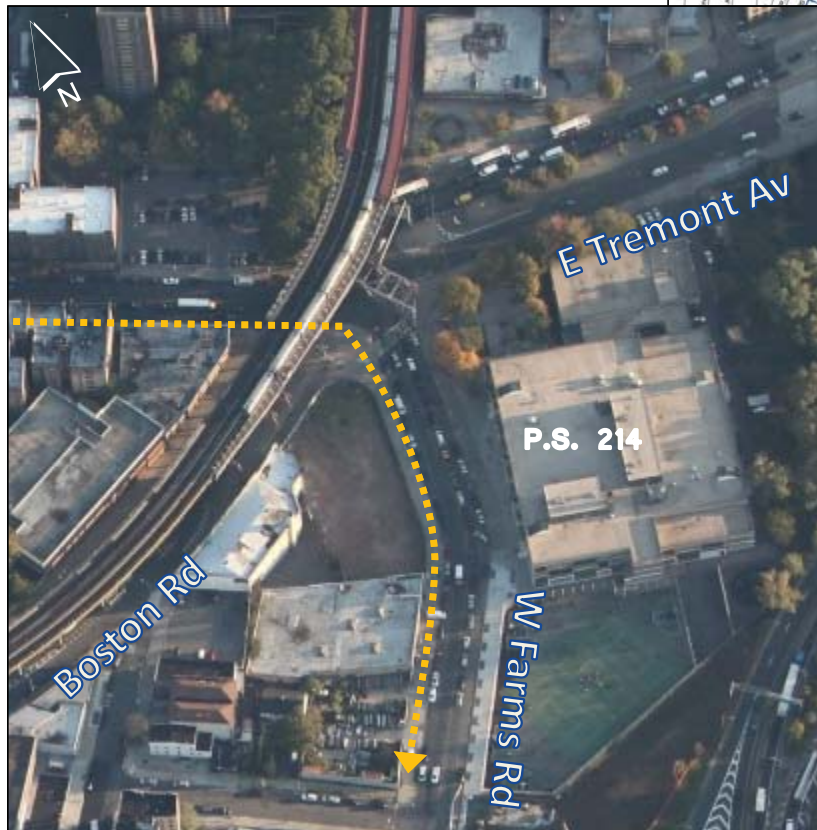


Photo source: Skycomp survey for Sheridan Expressway–Hunts Point Study – Morning Peak



- Intersection of E Tremont Av and W Farms Rd / Boston Rd is complex due to street alignment and elevated train supports. P.S. 214 at the top of W Farms Rd has significant curbside and pedestrian activity during school start/end times.
- Note about speeds: yellow through red are indicative of congested areas. Smaller, isolated areas of yellow through red are typical at signalized or stop-controlled intersections.

Southern Blvd – Boston Rd

Tractor trailers are typically 13'–13'6" high, so Southern Blvd would only serve rerouted single-unit trucks to Westchester Av



Photo source: NYCDOT



- Southern Blvd as a route for tractor-trailers is limited by the elevated train station's height clearance at Boston Rd. A tractor-trailer going southbound on Southern Blvd would have to turn southwest onto Boston Rd.
- Note about speeds: yellow through red are indicative of congested areas. Smaller, isolated areas of yellow through red are typical at signalized or stop-controlled intersections.

Southern Blvd – E 163 St (Crames Square)

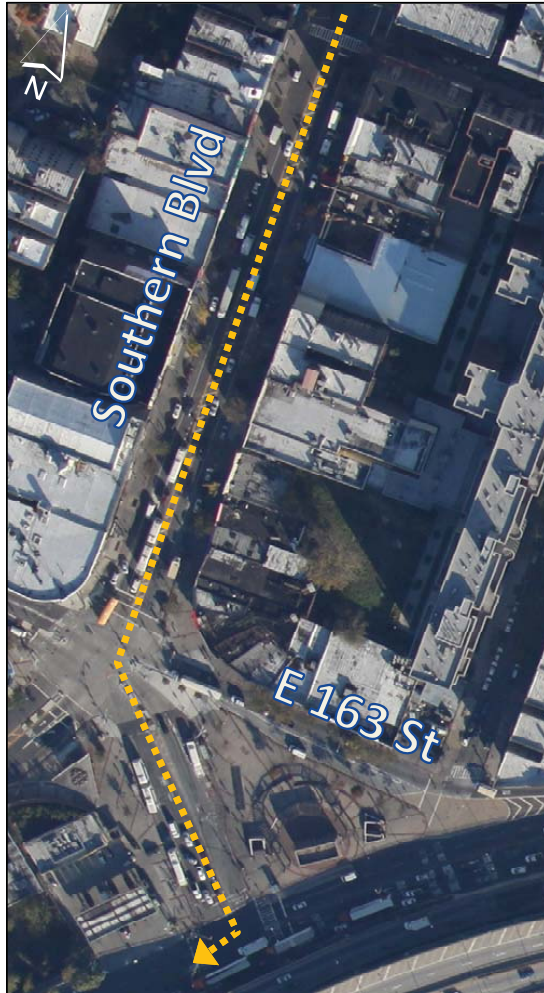
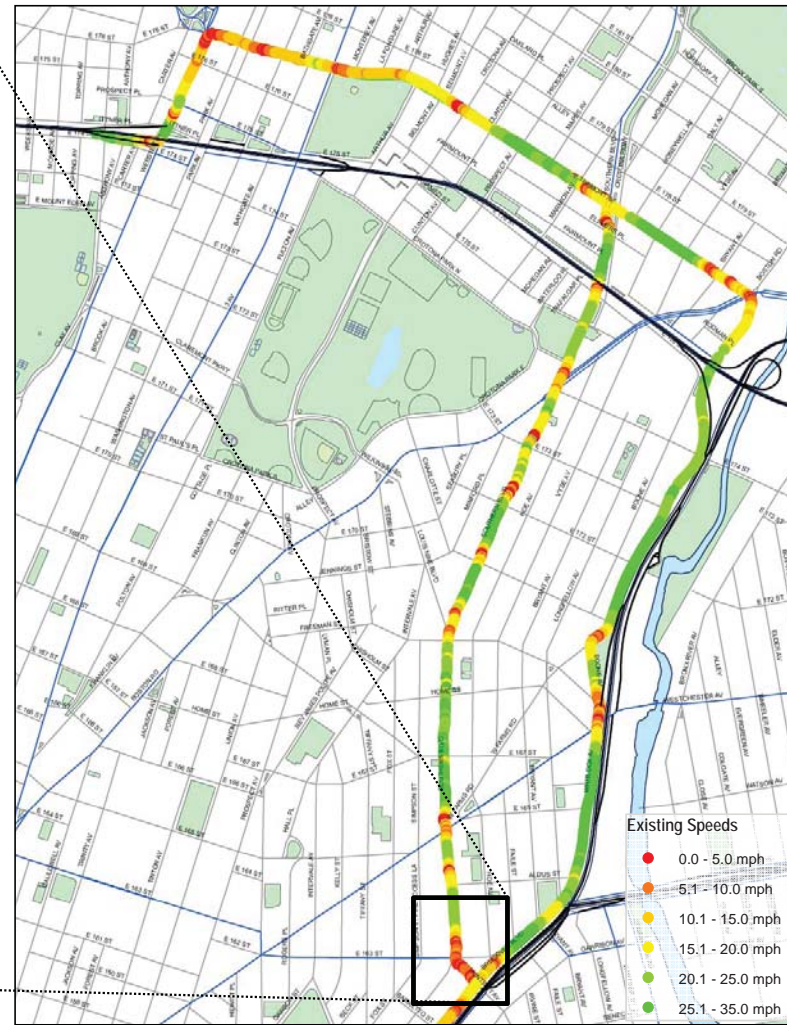


Photo source: Skycomp survey for Sheridan Expressway–Hunts Point Study – Morning Peak



- The southern end of the Southern Blvd truck route goes through Crames Square, requiring a left turn from the turn bay on Southern Blvd onto the short block of Hunts Point Av. Trucks would then have to turn right onto the Bruckner Blvd mainline to set up for a left turn at Tiffany St or Leggett Av.
- Note about speeds: yellow through red are indicative of congested areas. Smaller, isolated areas of yellow through red are typical at signalized or stop-controlled intersections.

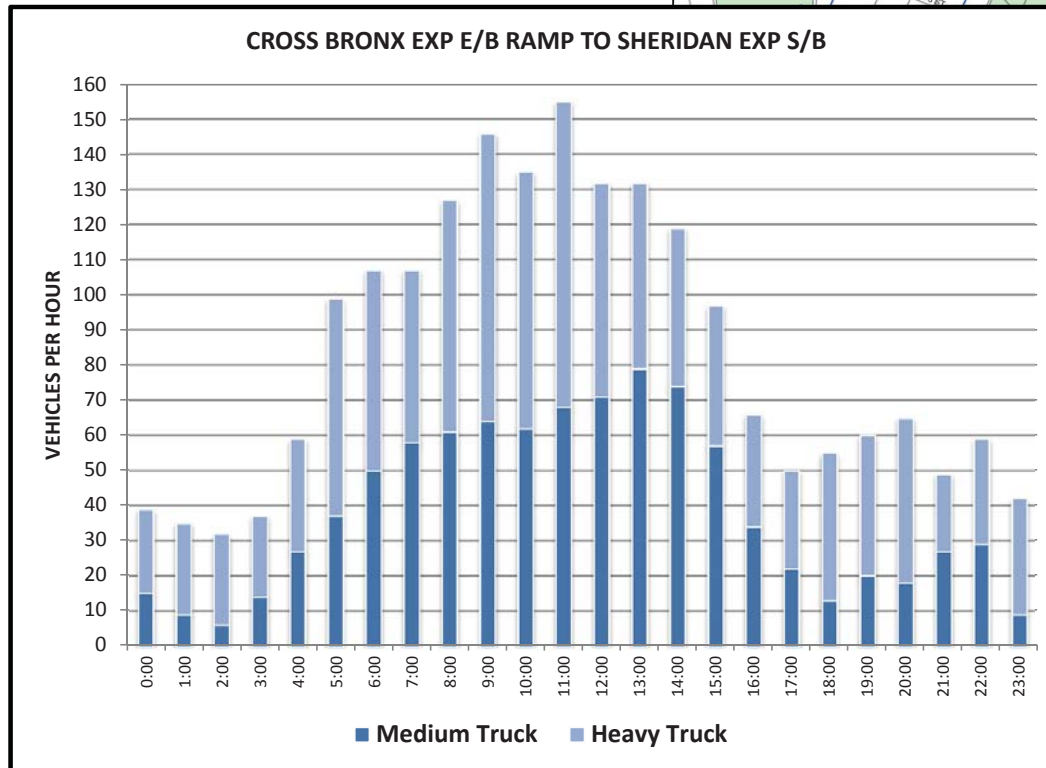
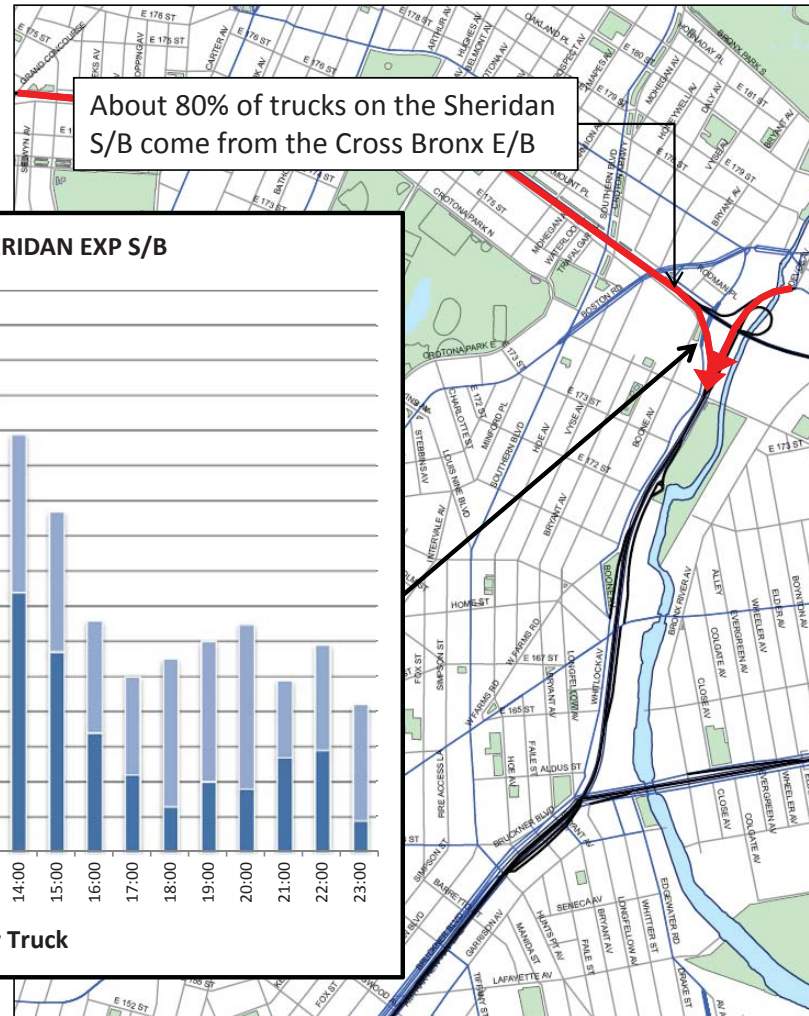
Truck Routing: Cross Bronx Exp to Hunts Point

Route	Distance	Avg. Travel Time	Avg. Speed
via Sheridan Exp to Whitlock Av, turn at Tiffany St	3.8 miles	10.7 minutes	20.9 mph
via E Tremont Av to Southern Blvd, turn at Tiffany St	4.2 miles	24.3 minutes	10.3 mph
via E Tremont Av to W Farms Rd, turn at Tiffany St	4.6 miles	21.1 minutes	13.0 mph
via Bronx River Av* to Bruckner Blvd, turn at Tiffany St	5.0 miles	15.1 minutes	19.9 mph

Comparing distances, travel times and speeds from vicinity of Webster Av exit on Cross Bronx (control point) to Hunts Point:

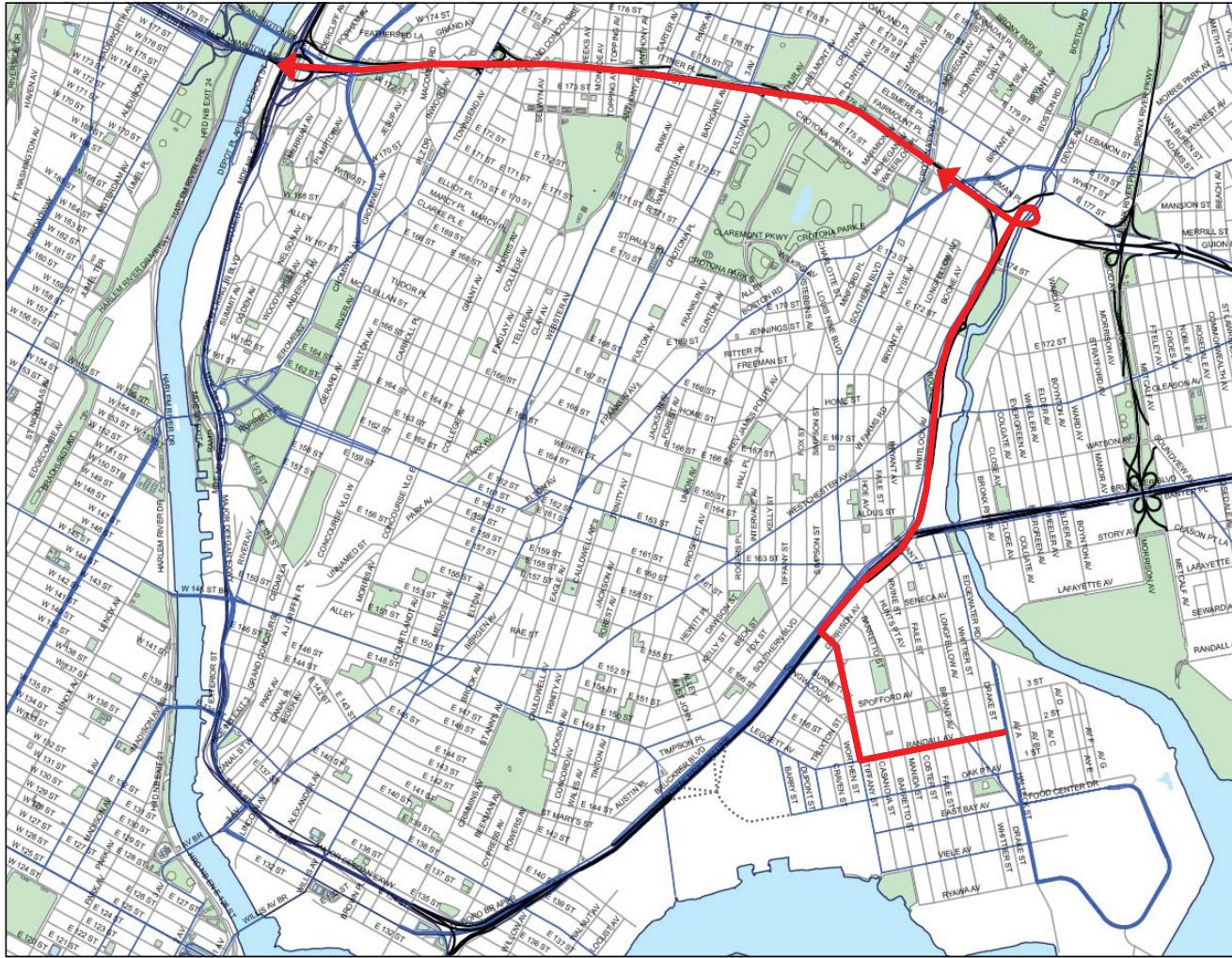
- Southern Blvd & W Farms Rd routes: Though about 10-20% longer in distance compared to Sheridan route, travel times are up to 2-2.5 times more.
- Bronx River Av route: (Note – not currently a designated truck route) Travel time about 40% more.

Truck Volumes: Eastbound Cross Bronx Ramp to Sheridan



- Over a 24-hour period, the majority (80%) of Sheridan’s southbound trucks are from the eastbound Cross Bronx.
- Total truck volumes build throughout AM and midday hours. Tractor-trailers (heavy trucks) are prevalent throughout the 24-hour period. Medium trucks peak more during AM and midday hours.
- A smaller share of trucks (about 20%) come from E 177 St / E Tremont Av.
- Many of the Sheridan’s southbound trucks exit to Whitlock Av, including those to Hunts Point. The rest continue to the Bruckner Expressway.

Truck Routing: Hunts Point to Cross Bronx Exp



- Route Overview: Outbound trucks from Hunts Point enter the Sheridan via the ramp from Bruckner Blvd at Hunts Point Av, then travel north to the Cross Bronx.

Truck Rerouting: Hunts Point to Cross Bronx Exp

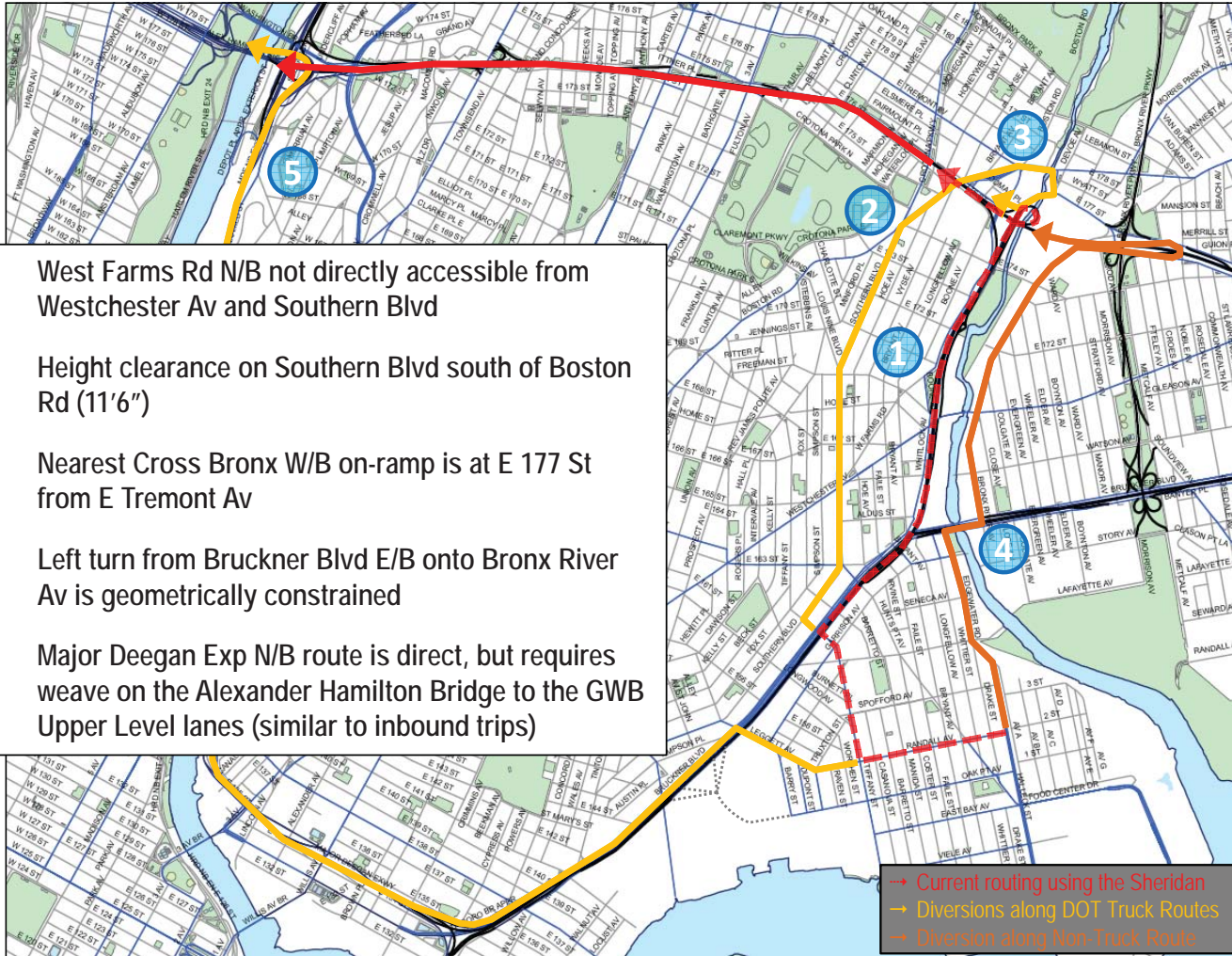


21

For these trucks to I-95, alternative trucks routes include:

- The Major Deegan, accessible by traveling down Bruckner Blvd – or directly from the Bruckner Expressway with the Oak Point ramps built. The Major Deegan route requires a westbound weave maneuver at the AHB.
- Southern Blvd, with the nearest westbound Cross Bronx entrance ramp at E 177 St, but the route is limited for tractor-trailers by the height clearance issues at Boston Rd.
- Bronx River Av also provides access from the next I-95 exit, but the roadway is not designated as a truck route and the route is circuitous.
- West Farms Rd is isolated in the northbound direction for outbound truck access.

Truck Routing: Hunts Point to Cross Bronx Exp



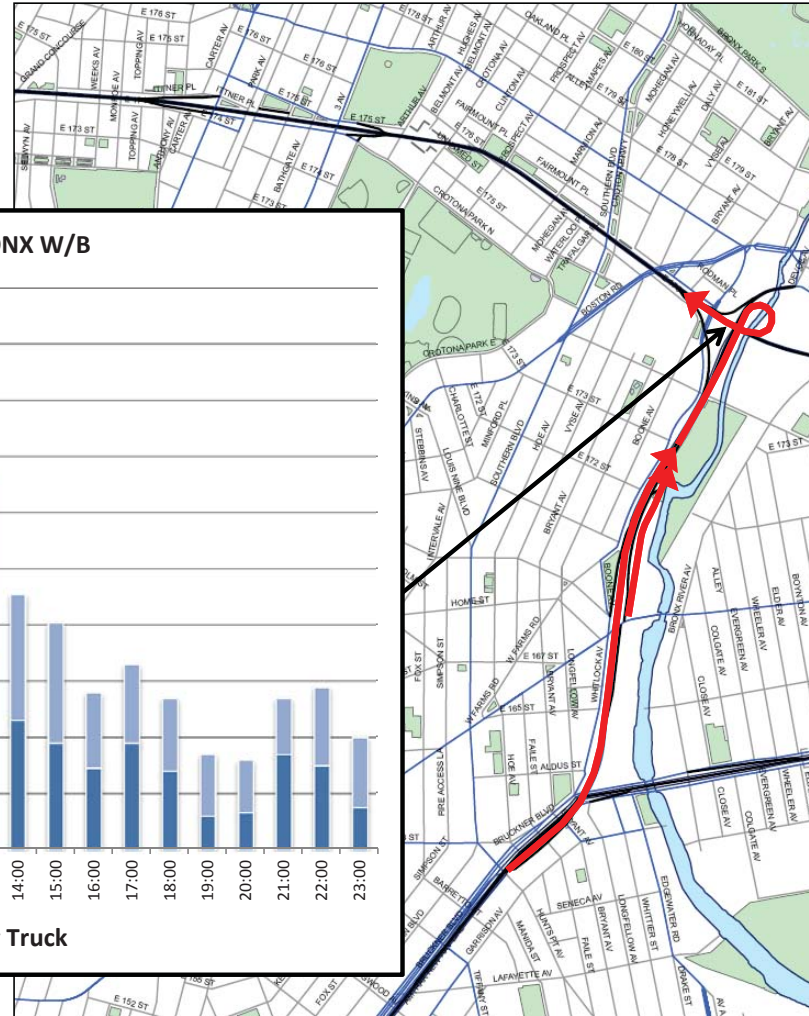
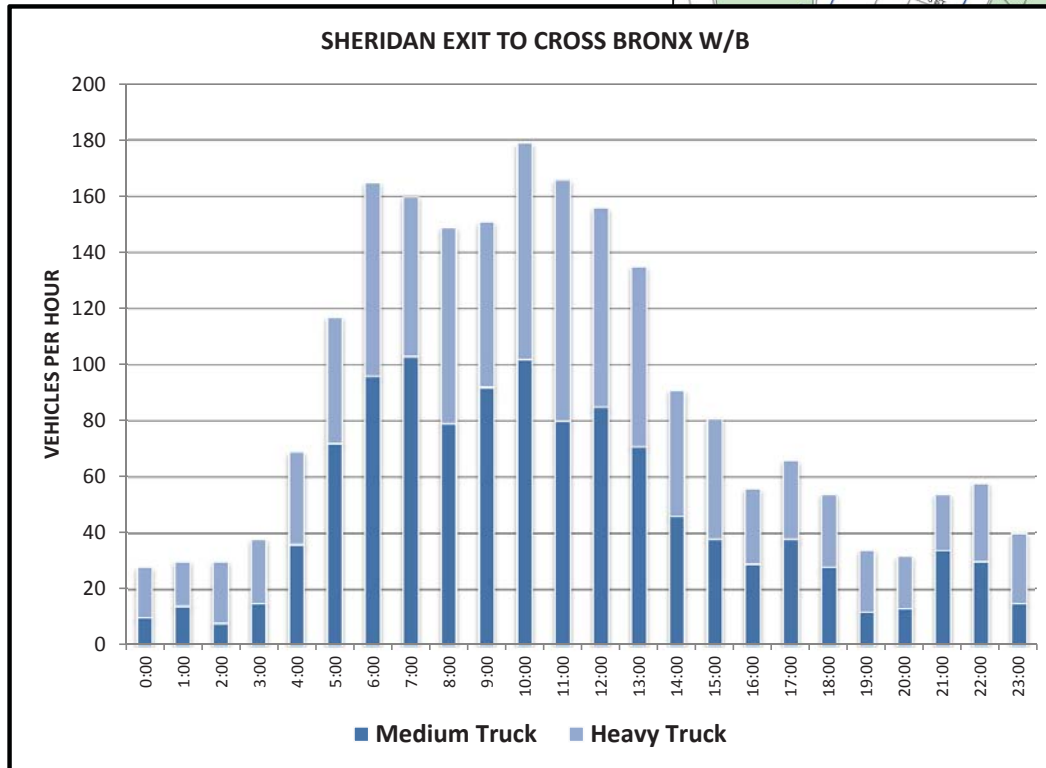
Truck Routing: Hunts Point to Alexander Hamilton Br

Route	Distance	Avg. Travel Time	Avg. Speed
via Tiffany St & Bruckner Blvd E/B to Sheridan Exp & Cross Bronx Exp	5.5 miles	13.2 minutes	24.9 mph
via Leggett Av & Bruckner Blvd W/B to Major Deegan Exp	5.8 miles	14.2 minutes	24.5 mph
via Southern Blvd & Boston Rd to Cross Bronx Exp (on-ramp at E 177 St)	5.9 miles	19.3 minutes	18.3 mph
via Edgewater Rd to Bronx River Av* & Cross Bronx Exp (on-ramp at Noble Av)	5.6 miles	18.2 minutes	18.5 mph

* Currently not an NYCDOT Truck Route.

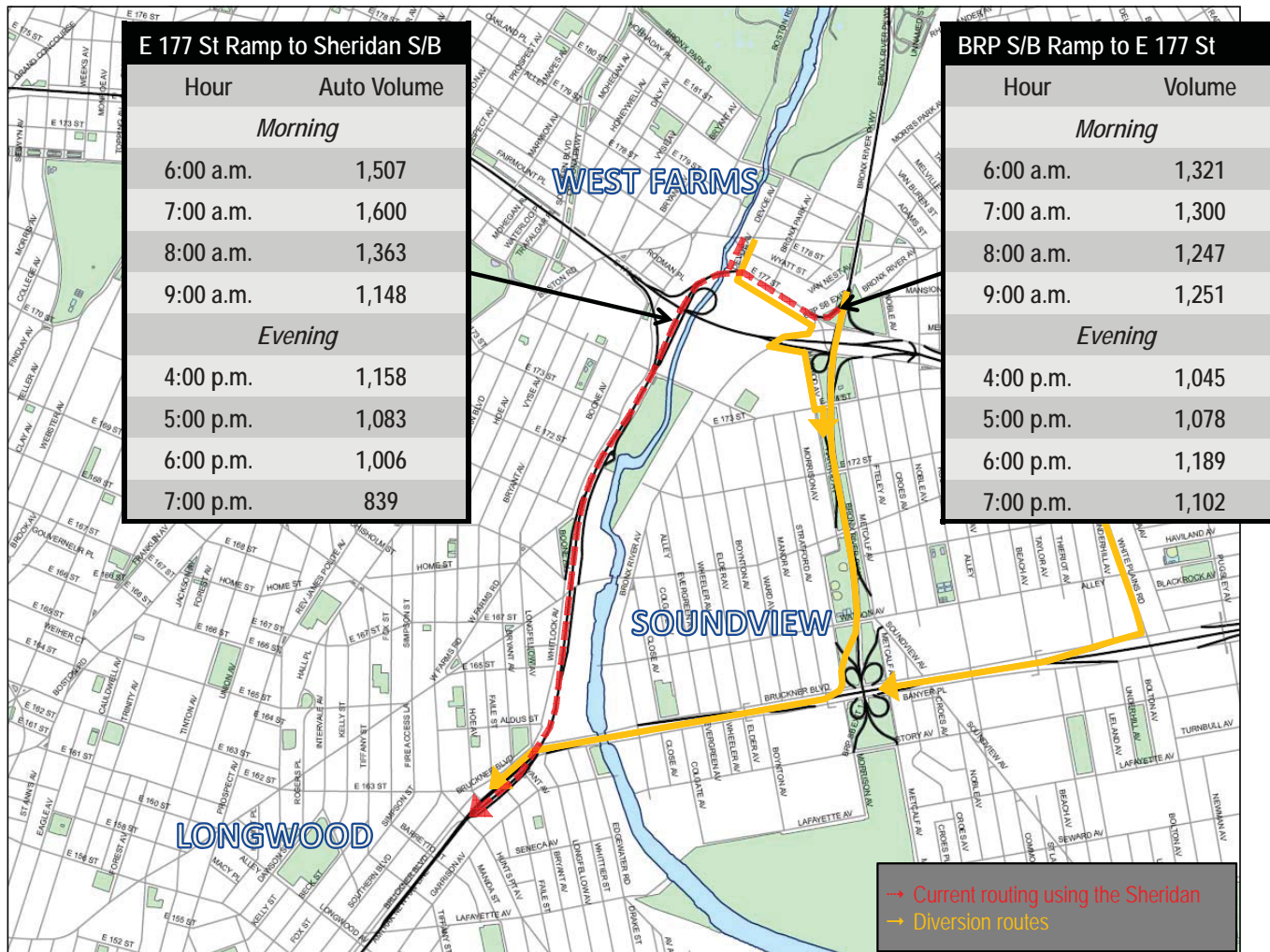
- Travel times for the Sheridan and Major Deegan outbound routes are comparable, with the westbound weave for Major Deegan traffic making the Sheridan typically more attractive.
- The Southern Blvd outbound route is about 50% longer than the Sheridan route, but is also limited for tractor-trailers by the height clearance issues at Boston Rd.
- The Bronx River Av route is comparable to Southern Blvd and does not have the height clearance issues, but Bronx River Av is not currently a designated truck route.

Truck Volumes: Northbound Sheridan Exit to Cross Bronx



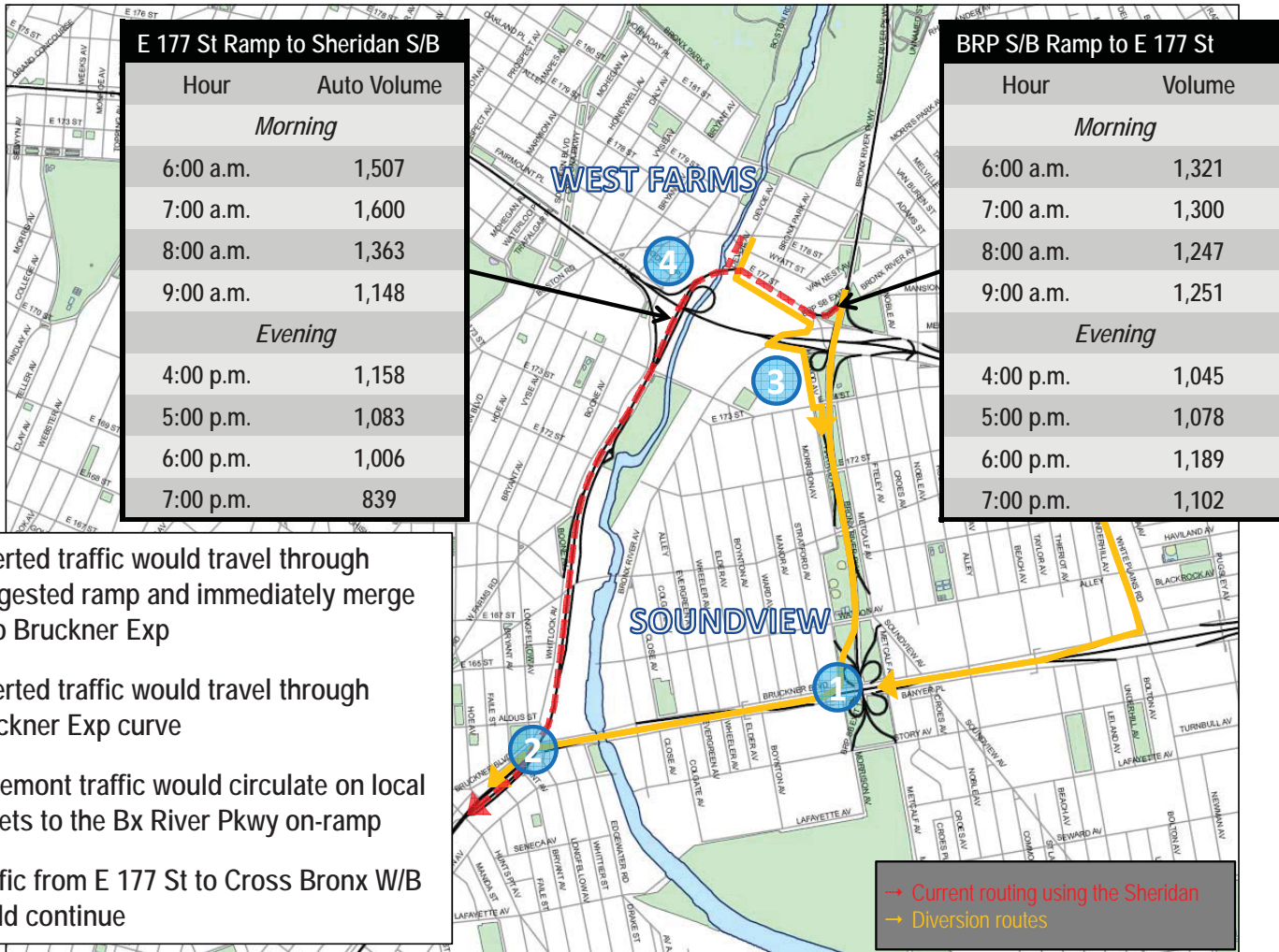
- Similar to southbound trucks, total northbound truck volumes build throughout AM and midday hours.

Auto Routing: Bronx River Pkwy to Bruckner Exp



- Traffic on the Bronx River Parkway would continue southbound to the ramp to Bruckner Blvd, which then connects to Bruckner Expressway.
- Local traffic from E Tremont Av area would use local streets or also enter the Bronx River Parkway to go south. Local streets that complete the connection between E Tremont Av and the southbound Bronx River Parkway include:
 - Harrod Av
 - E 174 St
- Some traffic may use White Plains Rd to enter the Bruckner Expressway further east.

Auto Routing: Bronx River Pkwy to Bruckner Exp



Bronx River Pkwy S/B ramp to Bruckner Blvd W/B

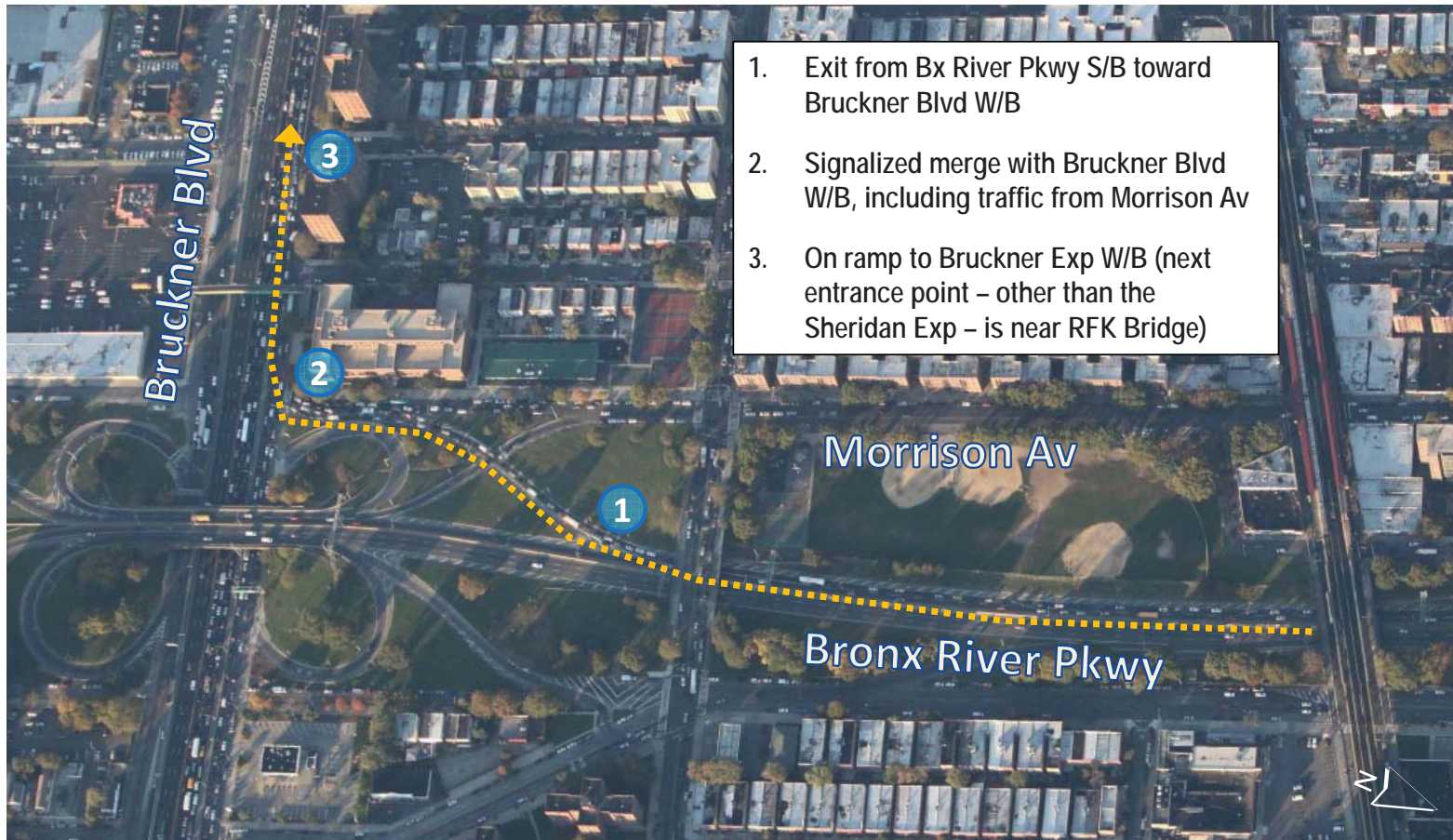
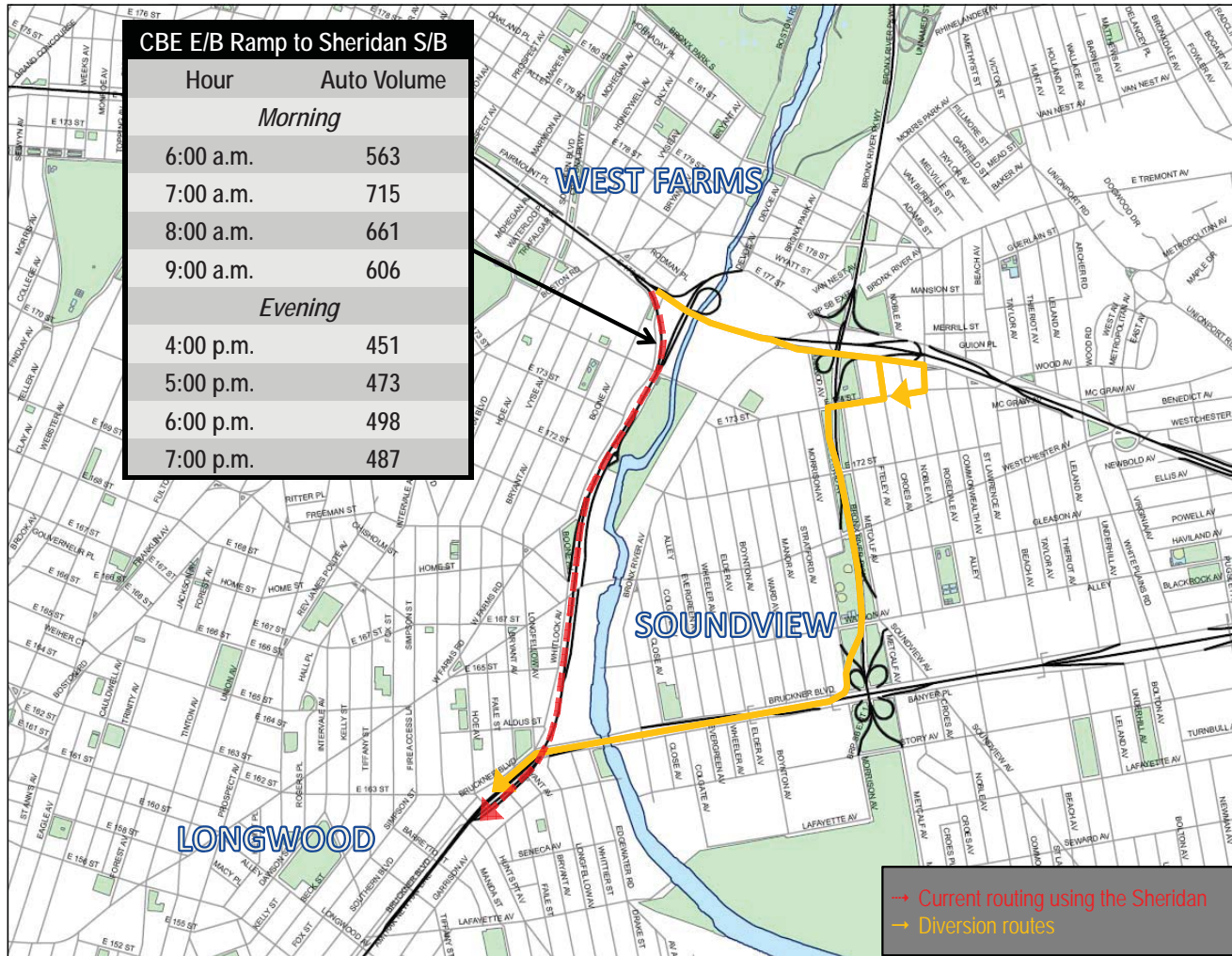


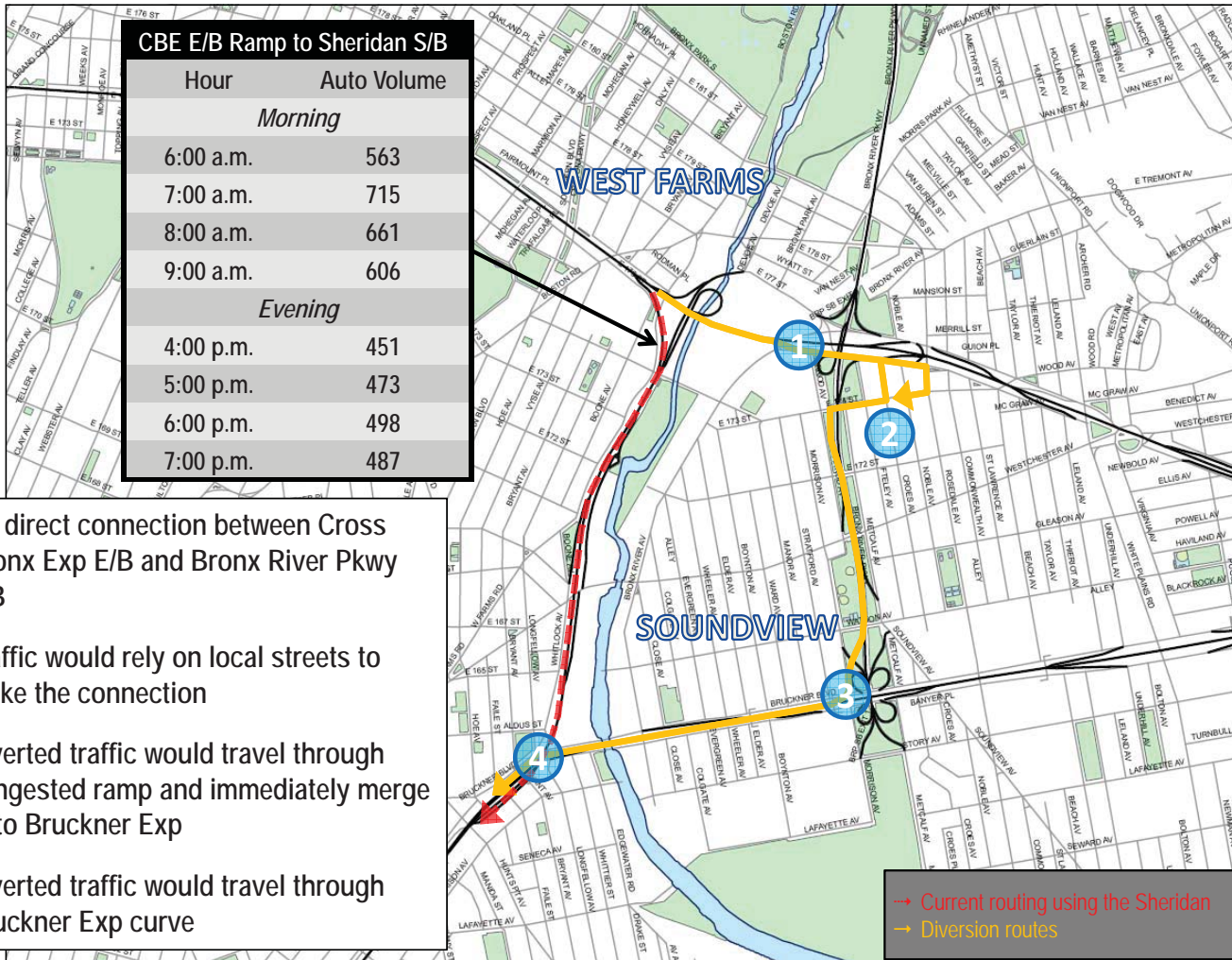
Photo source: Skycomp survey for Sheridan Expressway–Hunts Point Study – Morning Peak

Auto Rerouting: Cross Bronx Exp to Bruckner Exp



- Local streets that complete the connection between the eastbound Cross Bronx and the southbound Bronx River Parkway include:
 - Croes Av
 - Rosedale Av
 - E 174 St

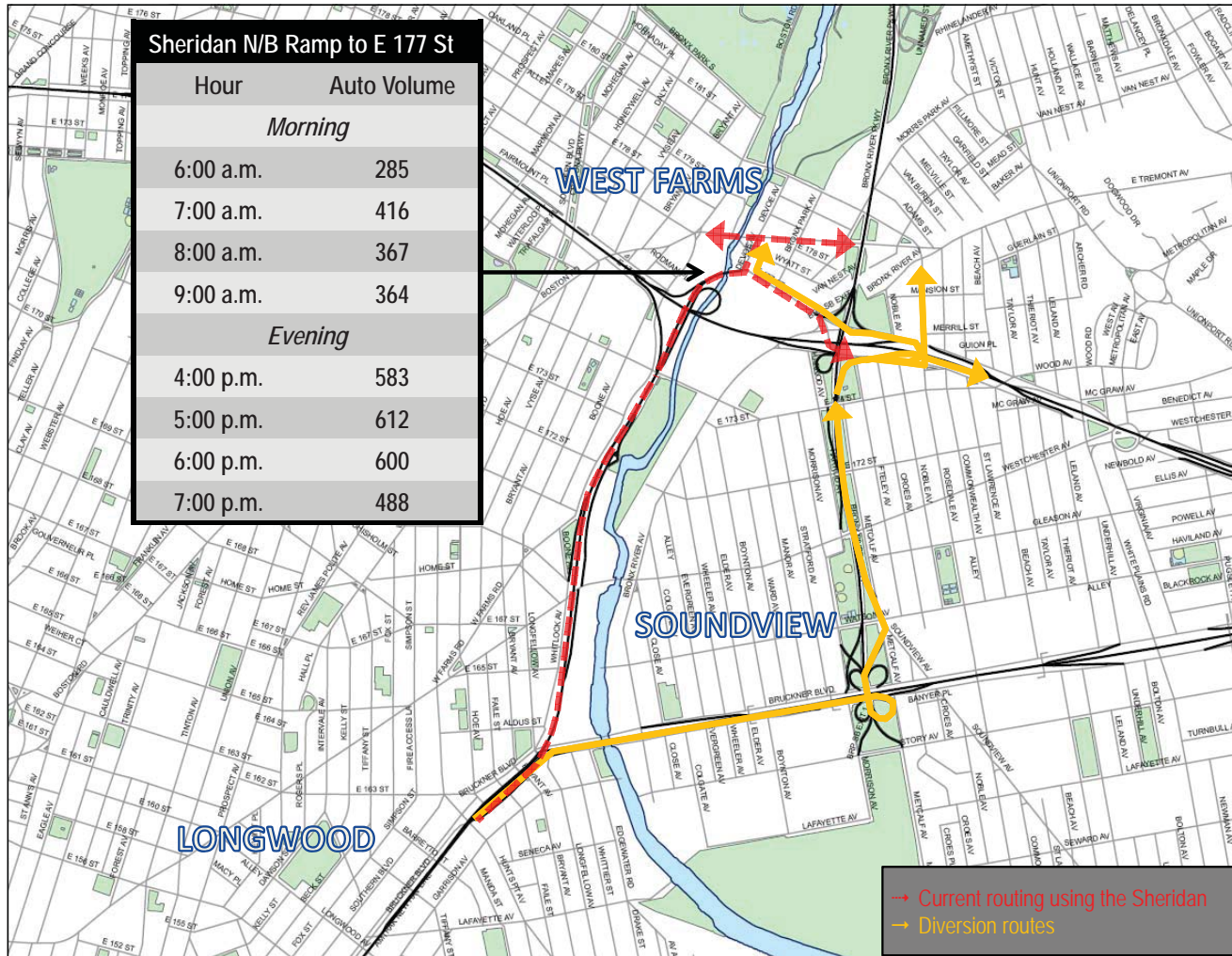
Auto Rerouting: Cross Bronx Exp to Bruckner Exp



1. No direct connection between Cross Bronx Exp E/B and Bronx River Pkwy S/B
2. Traffic would rely on local streets to make the connection
3. Diverted traffic would travel through congested ramp and immediately merge onto Bruckner Exp
4. Diverted traffic would travel through Bruckner Exp curve

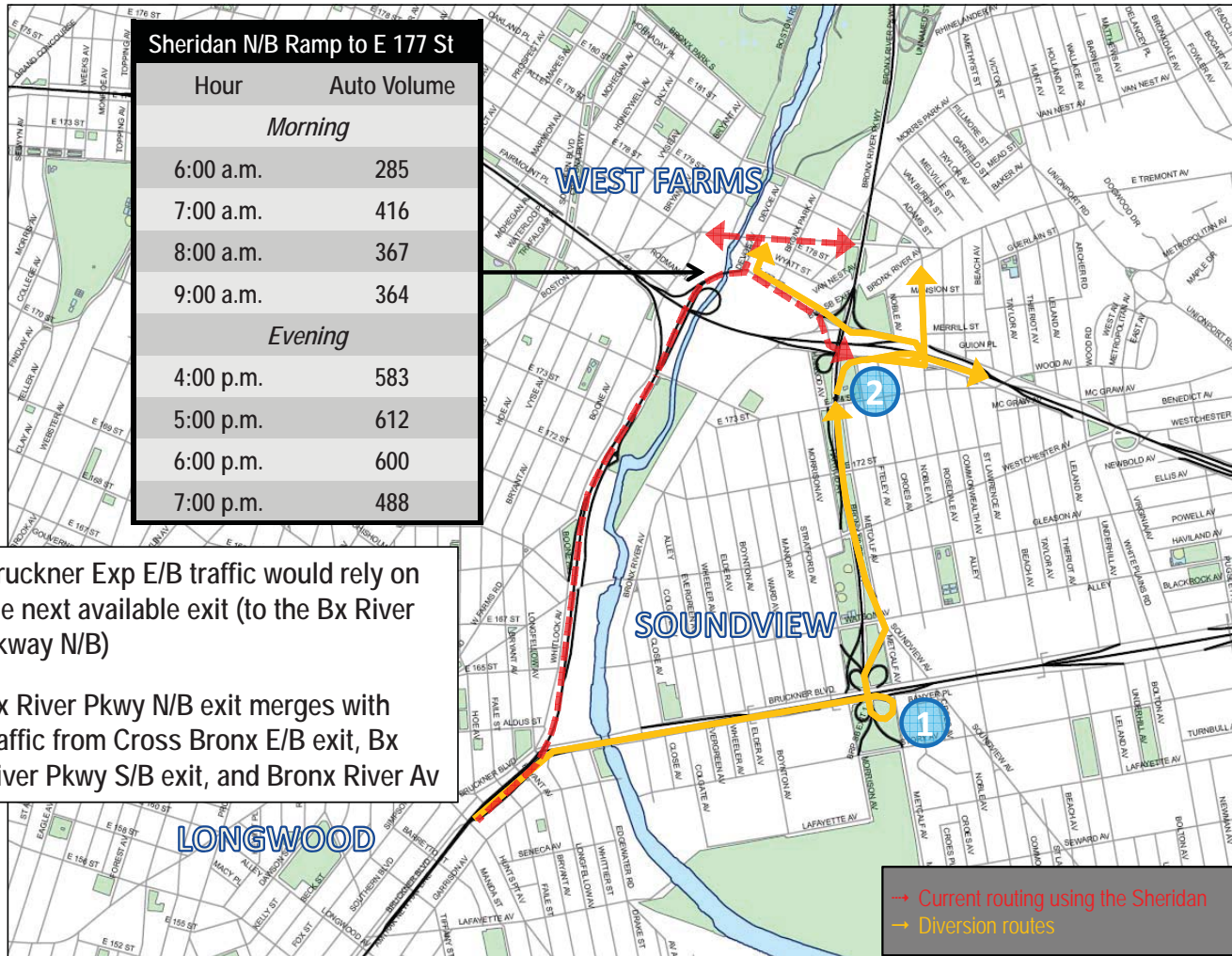
→ Current routing using the Sheridan
 → Diversion routes

Auto Rerouting: Bruckner Exp to E 177 St



- From the Bruckner Expressway, the Bronx River Parkway would be the primary diversion route for traffic to the E 177 St / E Tremont Av area. Diversion traffic would have to use the Cross Bronx service road between the Bronx River Parkway and local streets.

Auto Rerouting: Bruckner Exp to E 177 St



Cross Bronx service road at Bronx River Pkwy

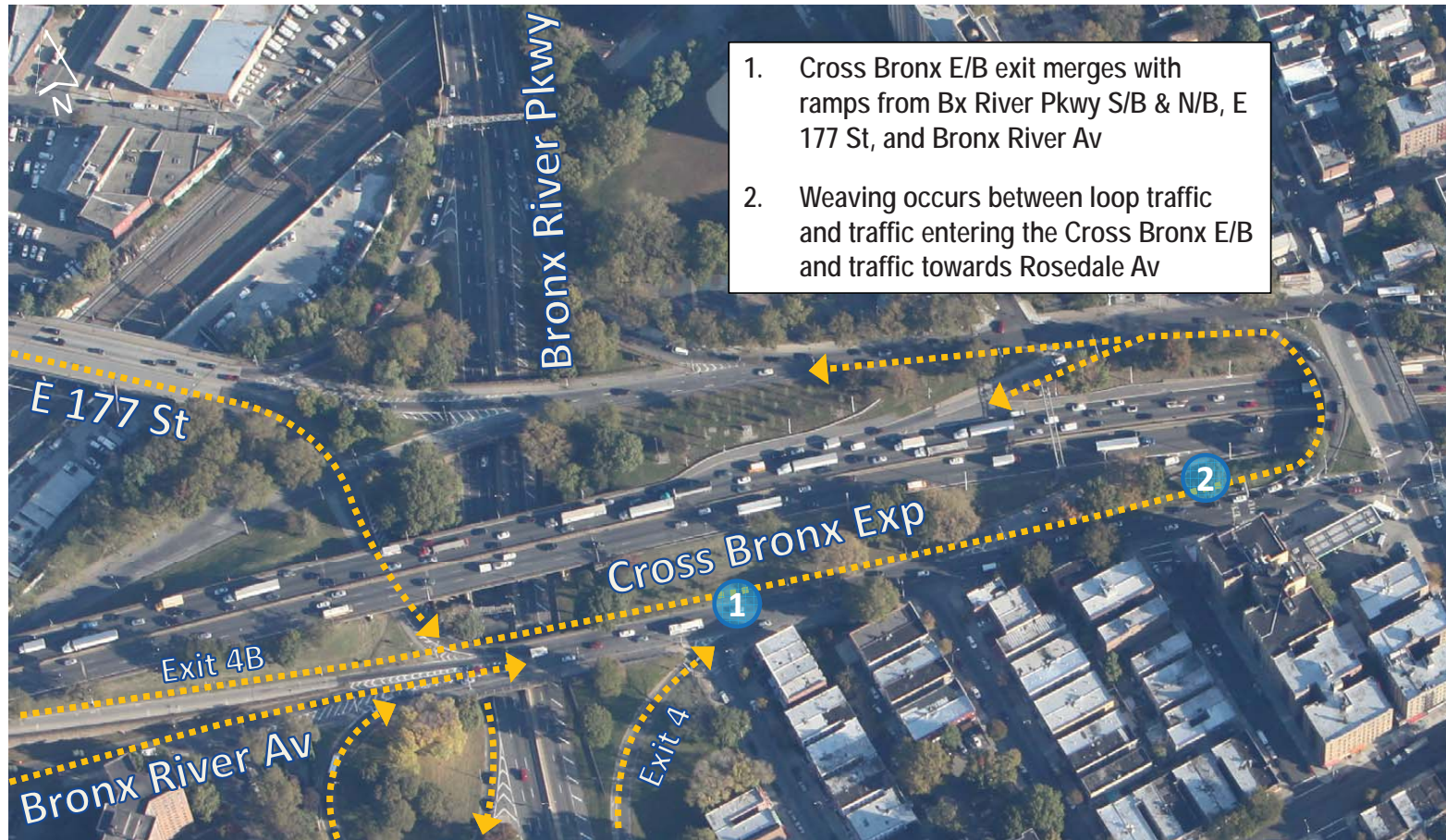
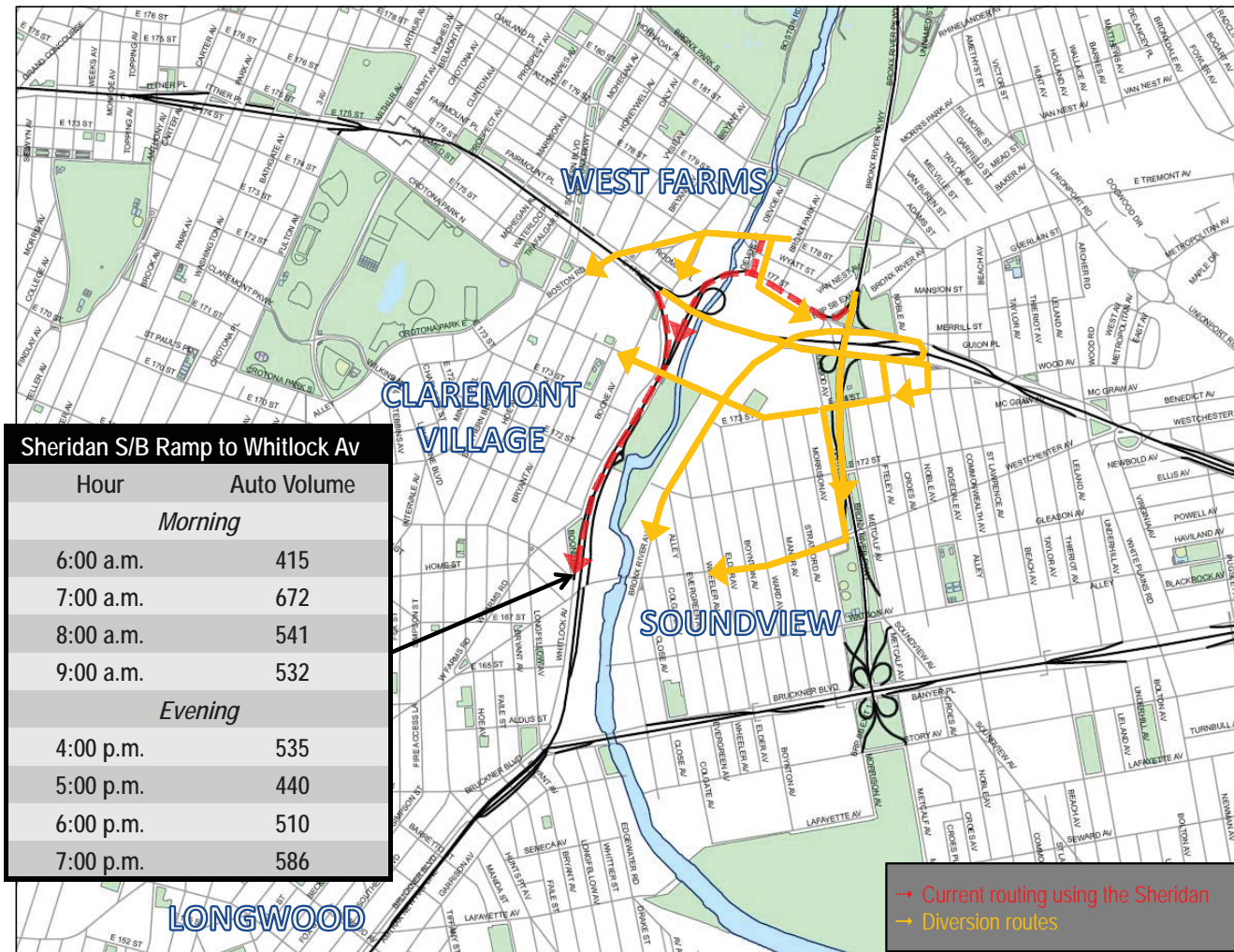


Photo source: Skycomp survey for Sheridan Expressway–Hunts Point Study – Morning Peak

Auto Rerouting: Local Access from the North



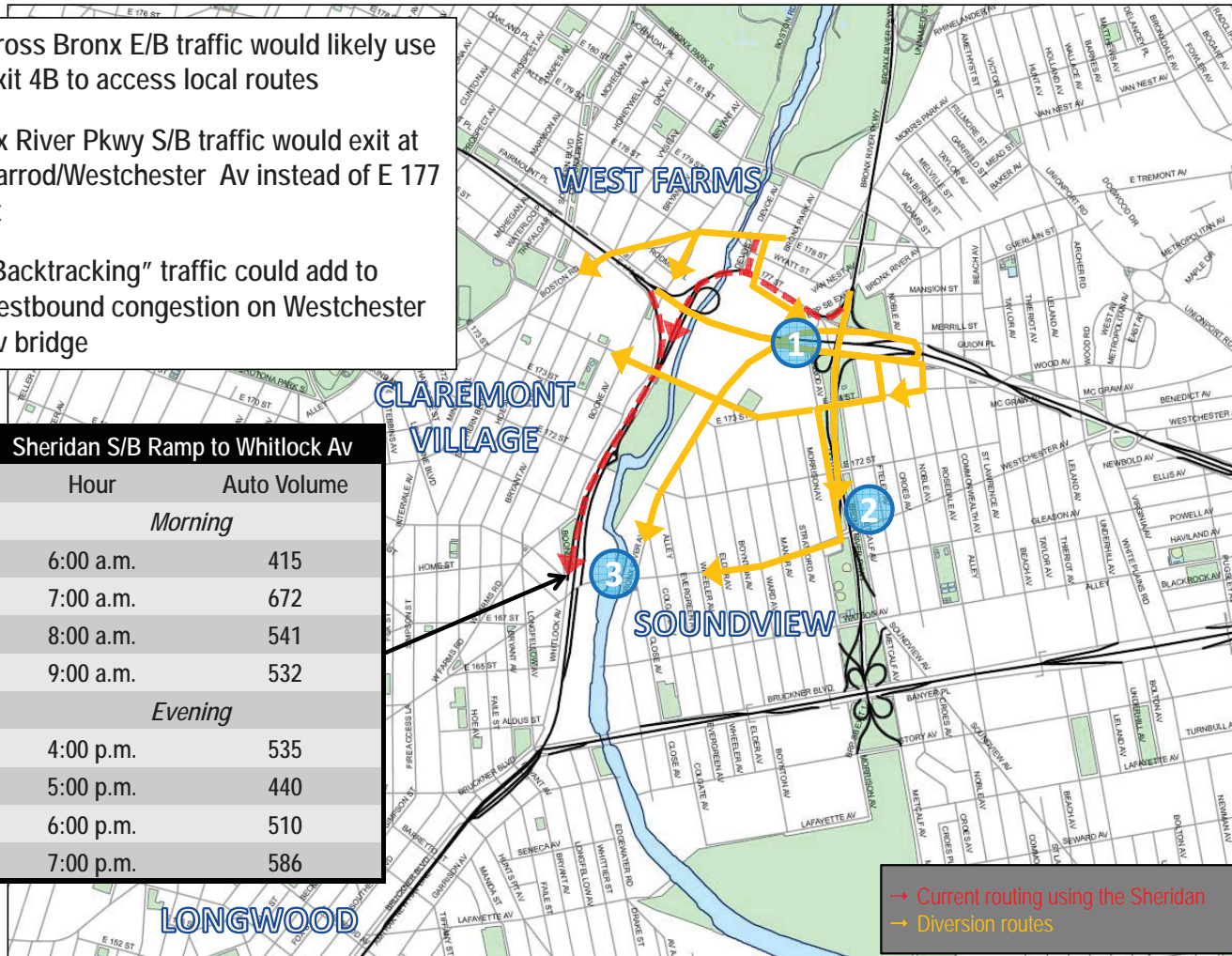
Primary diversions routes from the North:

- Bronx River Av
- Harrod Av
- Boston Rd
- E 174 St
- Westchester Av

Auto Rerouting: Local Access from the North

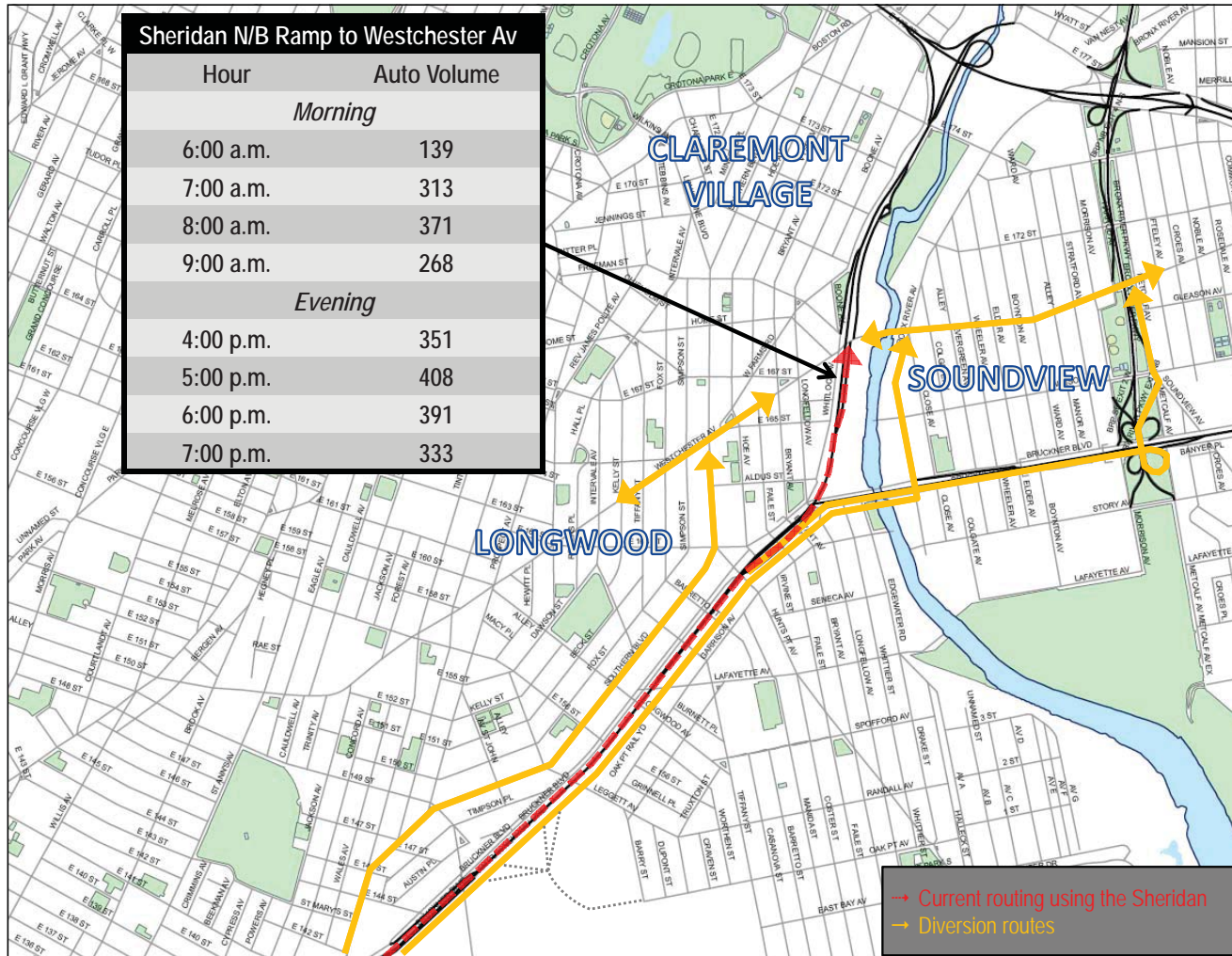
1. Cross Bronx E/B traffic would likely use Exit 4B to access local routes
2. Bx River Pkwy S/B traffic would exit at Harrod/Westchester Av instead of E 177 St
3. "Backtracking" traffic could add to westbound congestion on Westchester Av bridge

Sheridan S/B Ramp to Whitlock Av	
Hour	Auto Volume
<i>Morning</i>	
6:00 a.m.	415
7:00 a.m.	672
8:00 a.m.	541
9:00 a.m.	532
<i>Evening</i>	
4:00 p.m.	535
5:00 p.m.	440
6:00 p.m.	510
7:00 p.m.	586



→ Current routing using the Sheridan
 → Diversion routes

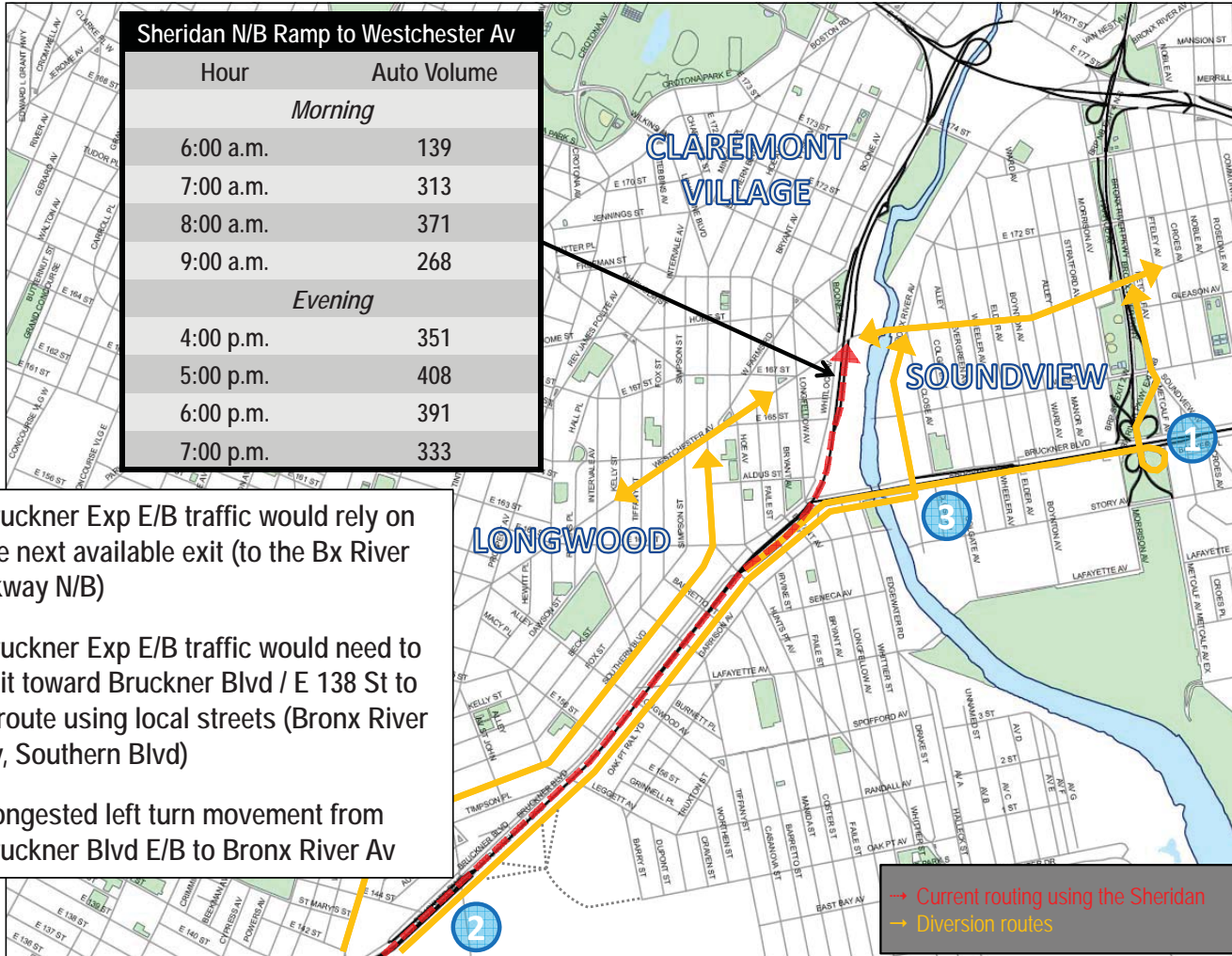
Auto Rerouting: Local Access from the South



Primary diversions routes from the South:

- Southern Blvd
- Bronx River Av
- Bronx River Parkway
- Westchester Av

Auto Rerouting: Local Access from the South



Screening Analysis Conclusions

- Fatal flaws in Remove Scenario for:
 - Local street traffic
 - Travel time
 - Intersection performance
 - Truck re-routing
- No fatal flaws in Retain and Modify Scenarios

Due to impact on local street traffic, travel time, intersection performance, and truck re-routing, the Remove Scenario was deemed too detrimental and will not be considered further. The Retain and Modify Scenarios will continue to undergo additional analysis.

Sheridan Expressway Overview

- Connects the Cross Bronx and Bruckner Expressway
- Bypasses existing bottleneck on Bruckner Expressway over the Bronx River as well as the substandard interchange between the Bronx River Parkway and Bruckner Blvd
- Provides north-south truck route
- Alternative truck routes through the local street network are limited and discontinuous
- Operates under capacity
- The expressway has a number of limitations, including a limited number of interchanges and complicated intersections

Next Steps

Summer: Continue analysis of Retain and Modify Scenarios

Develop draft land use scenarios

Present draft land use scenarios to Community Working Group

Meetings with community boards

Next CWG: June 28

Business meeting in late summer

Fall: Present draft scenarios to public