

DOWNTOWN JAMAICA TRANSPORTATION STUDY

Future Conditions & Recommendations

Public Meeting #3
March 28, 2018

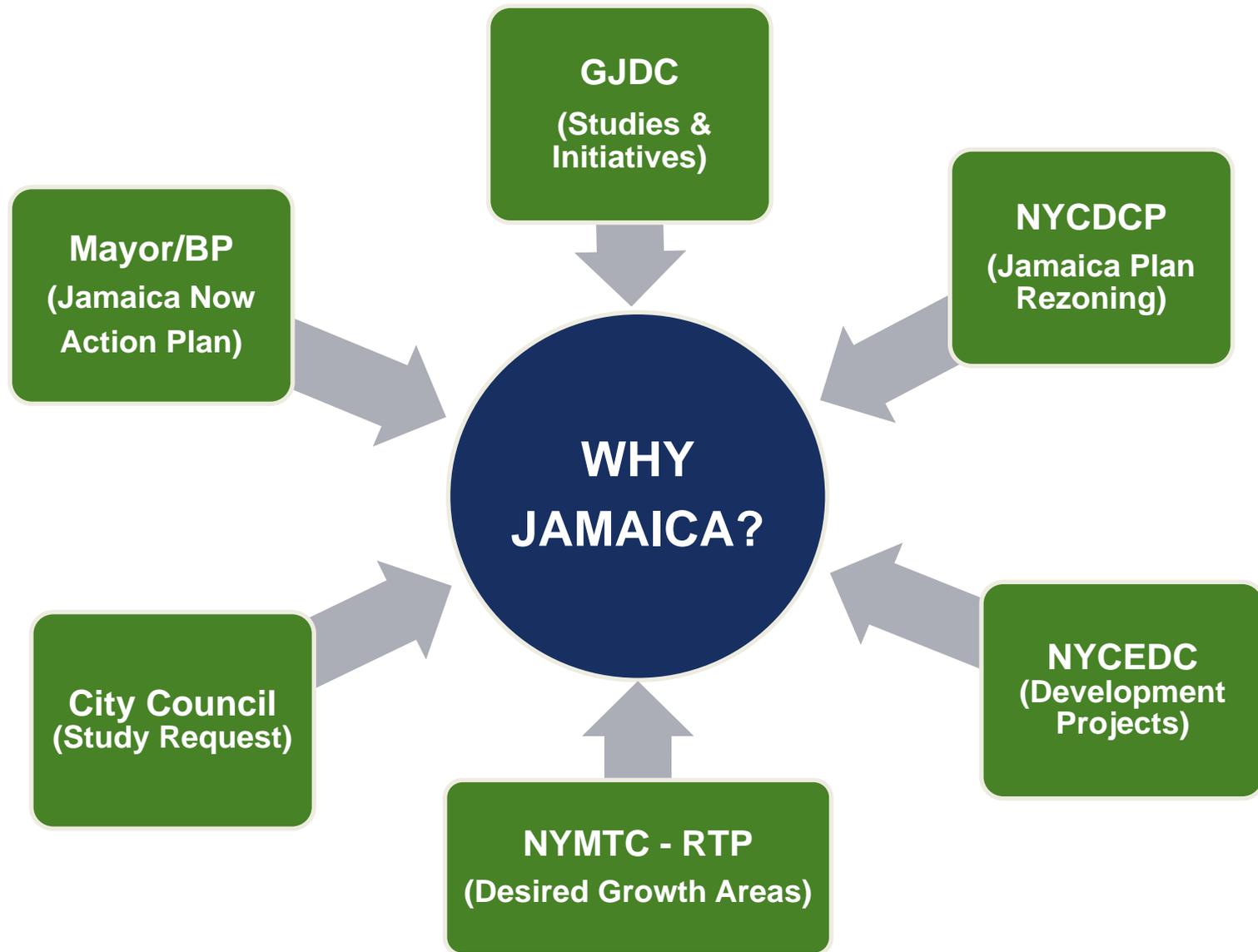


AGENDA

1. STUDY BACKGROUND
2. ANALYSIS AND FINDINGS
3. RECOMMENDATIONS & IMPROVEMENT MEASURES
4. NEXT STEPS

Study Background

1



OTHER MAJOR INITIATIVES

- Atlantic Avenue Extension
- Station Plaza
- York College Campus Expansion
- Van Wyck Expressway Widening
- NYCT Bus Depot Expansion
- Jamaica Airport Gateway (GJDC/RPA)
- Downtown Revitalization Initiative
- Citywide Commuter Van Study
- Citywide Freight Plan
- Streetscape & Urban Design Plan



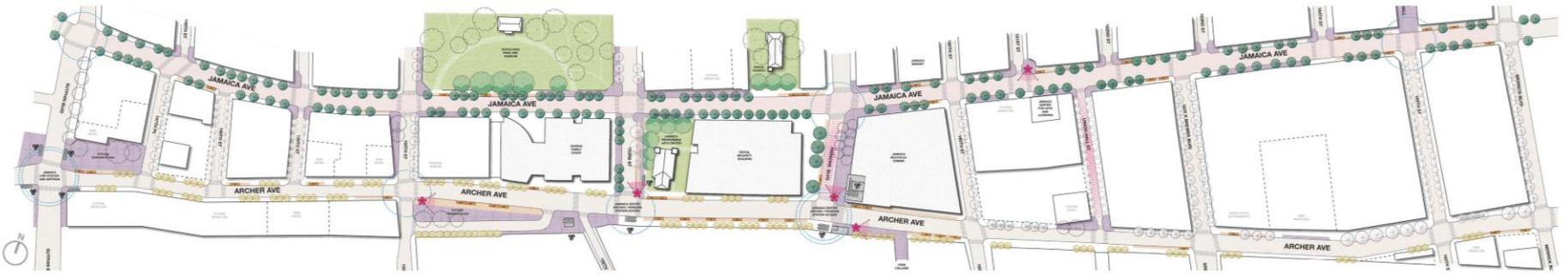
Atlantic Avenue Extension



Station Plaza

STREETSCAPE CONCEPT PLAN

DRAFT



Legend

-  **Proposed Public Space Amenity Zone**
featuring CityBench seating, movable seating, newstands, concessions at plazas, and sidewalk cafes
-  **Proposed Transit Amenity Zone**
featuring bus shelters, CityBench seating, bike parking, leaning bars, ticket kiosks, and wayfinding
-  Visualization Viewshed
-  Proposed Festival Street
-  Vision Zero Pedestrian Priority Intersection
-  Existing Green Space
-  Proposed Pedestrian Improvement Zone
-  Park Edge
-  ADA Ramp and High-Visibility Crosswalk
-  Existing and Proposed Jamaica Avenue Street Tree
-  Proposed Bus Shelter Location
-  Proposed Connected Tree Pit
-  Existing Subway Entrance
-  Proposed Elevated Planter

A. Archer Avenue



B. 153rd Street



C. Parsons Boulevard



D. York College Entrance



E. Jamaica Avenue



GOALS, OBJECTIVES & STUDY AREA

GOAL:

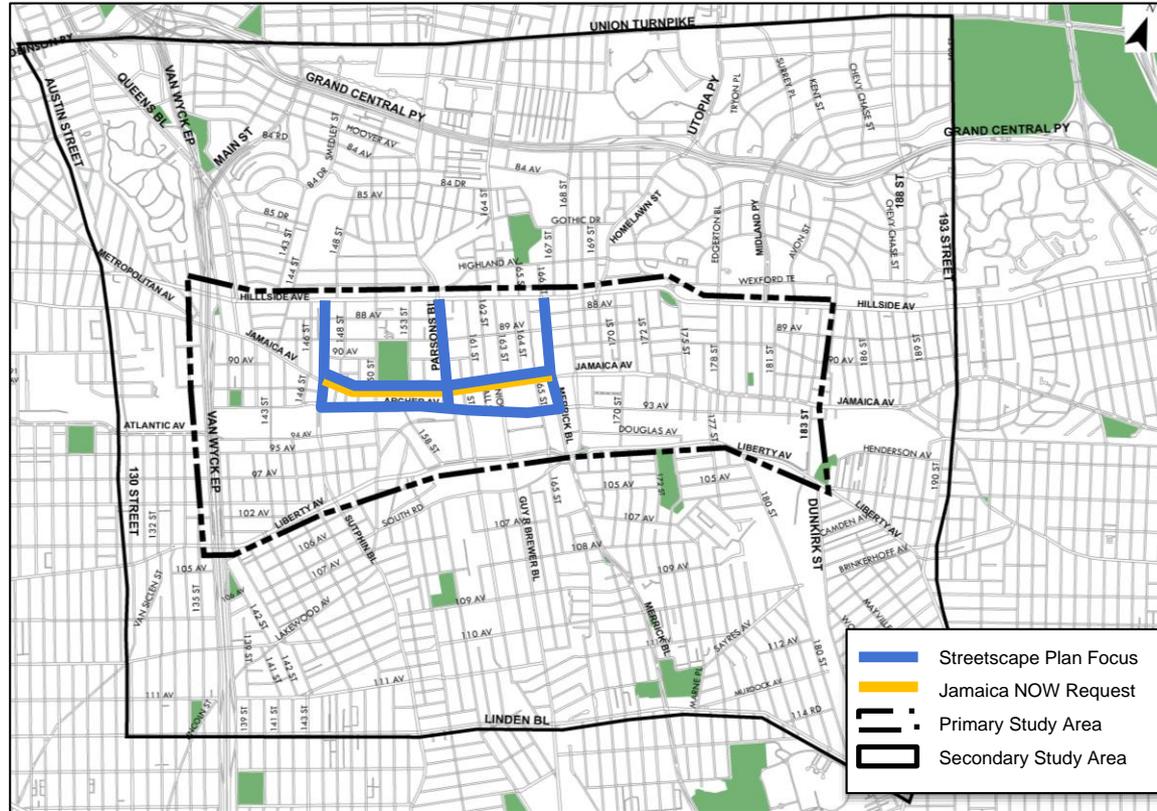
- To improve travel and traffic conditions, enhance mobility, safety, quality of life, and economic activity

OBJECTIVES:

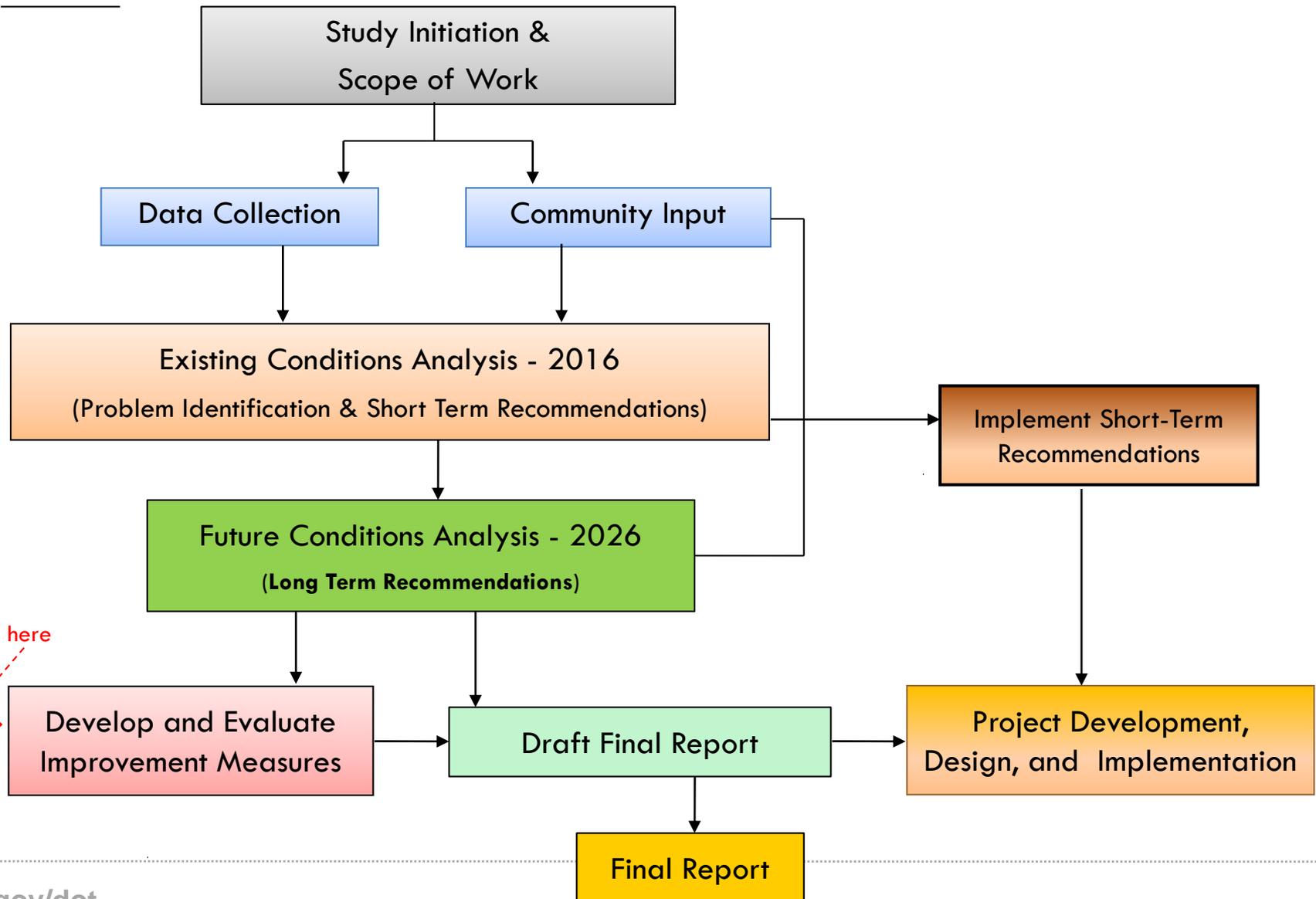
- Analyze existing traffic conditions
- Assess future travel demand/needs
- Develop recommendations to:
 - Reduce congestion and improve travel speeds
 - Enhance safety
 - Improve transit service
 - Improve pedestrian mobility/accessibility

STUDY AREAS:

- Primary – Hillside Ave, 183 St, Liberty Ave, Van Wyck Expwy
- Secondary – Union Tpke, 193 St/Farmers Blvd, Linden Blvd, 130 St/Austin St



STUDY PROCESS



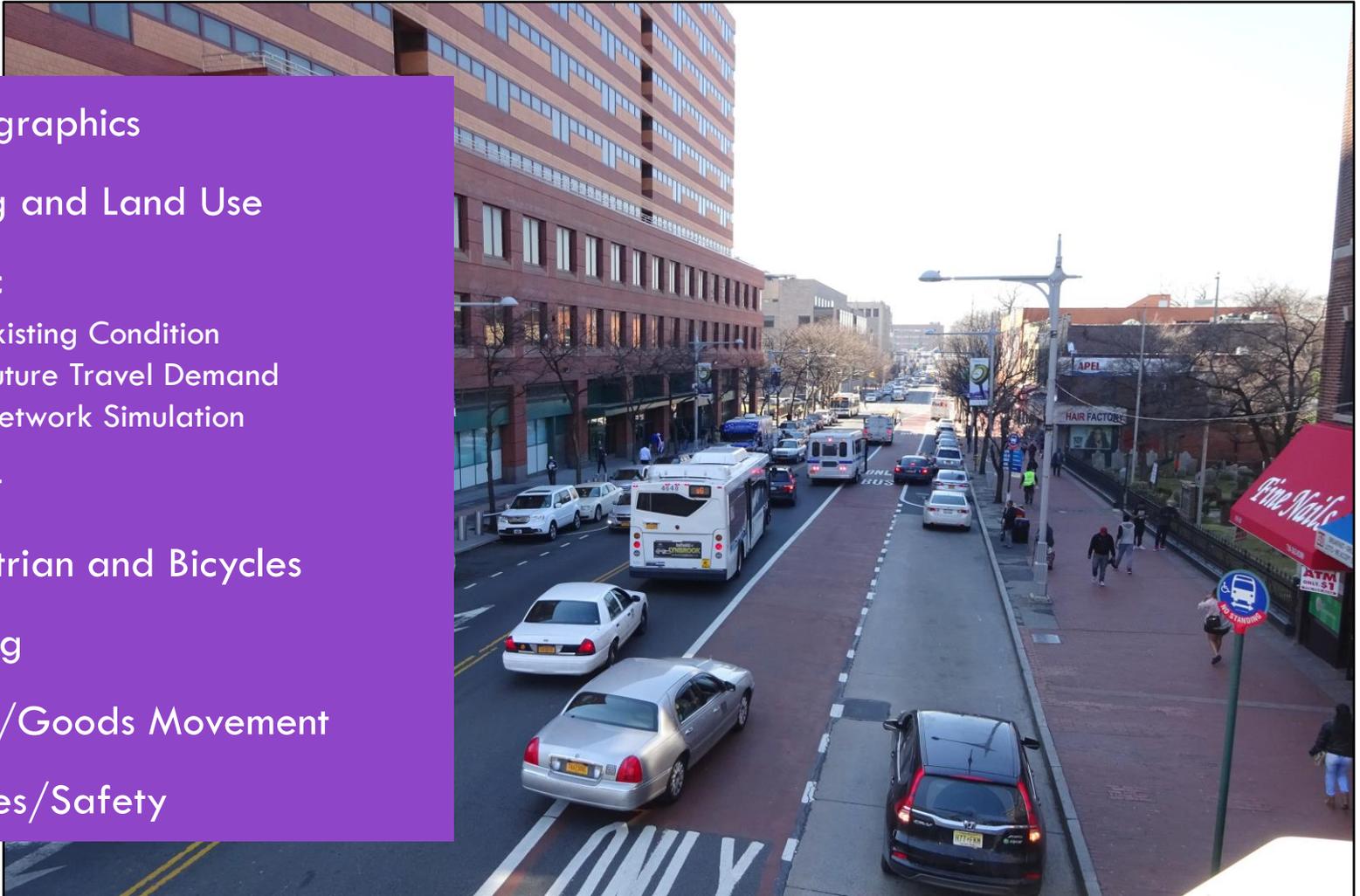
Summary of Analysis

- Existing (2016) & Future (2026) Conditions

2

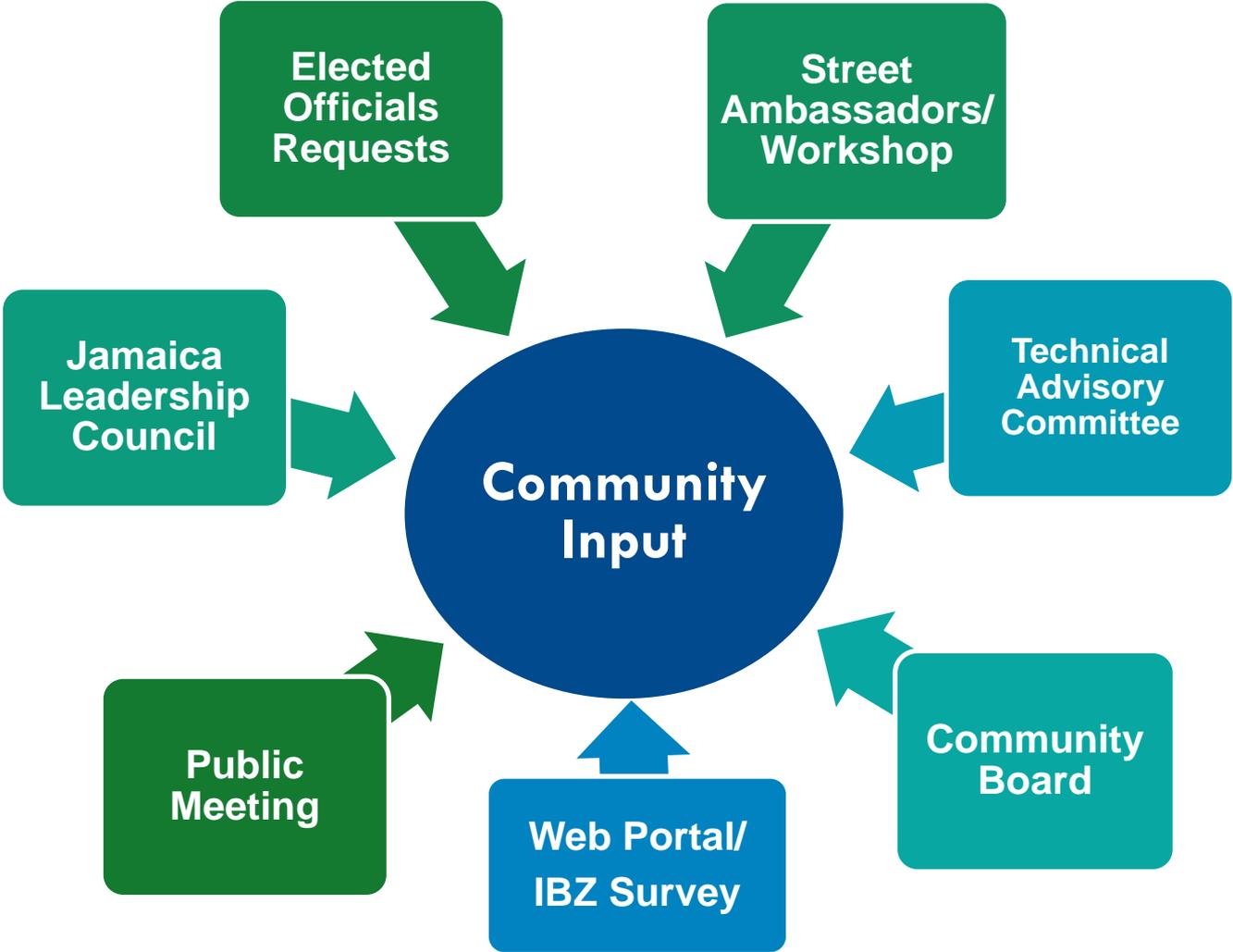
STUDY PLAN – DATA COLLECTION & ANALYSIS

- Demographics
- Zoning and Land Use
- Traffic
 - Existing Condition
 - Future Travel Demand
 - Network Simulation
- Transit
- Pedestrian and Bicycles
- Parking
- Trucks/Goods Movement
- Crashes/Safety



COMMUNITY INPUT

CONCERNS, ISSUES & IDEAS



WHAT WE HEARD

TAC/PUBLIC MEETING

- ❖ **Too much congestion; need TEA to direct traffic**
- ❖ **Too many buses – better manage buses circulating in the core**
- ❖ **Need to manage commuter van operations**
- ❖ Insufficient parking
- ❖ Provide better lighting to make the place more inviting and safe
- ❖ Use art to beautify LIRR retaining wall

STREET AMBASSADORS/WORKSHOP

- ❖ Too much congestion
- ❖ Speeding is prevalent; speed and red light cameras are needed
- ❖ Traffic Enforcement Agents needed at busy intersections
- ❖ Poor roadway condition - potholes, etc.
- ❖ Not enough parking spaces

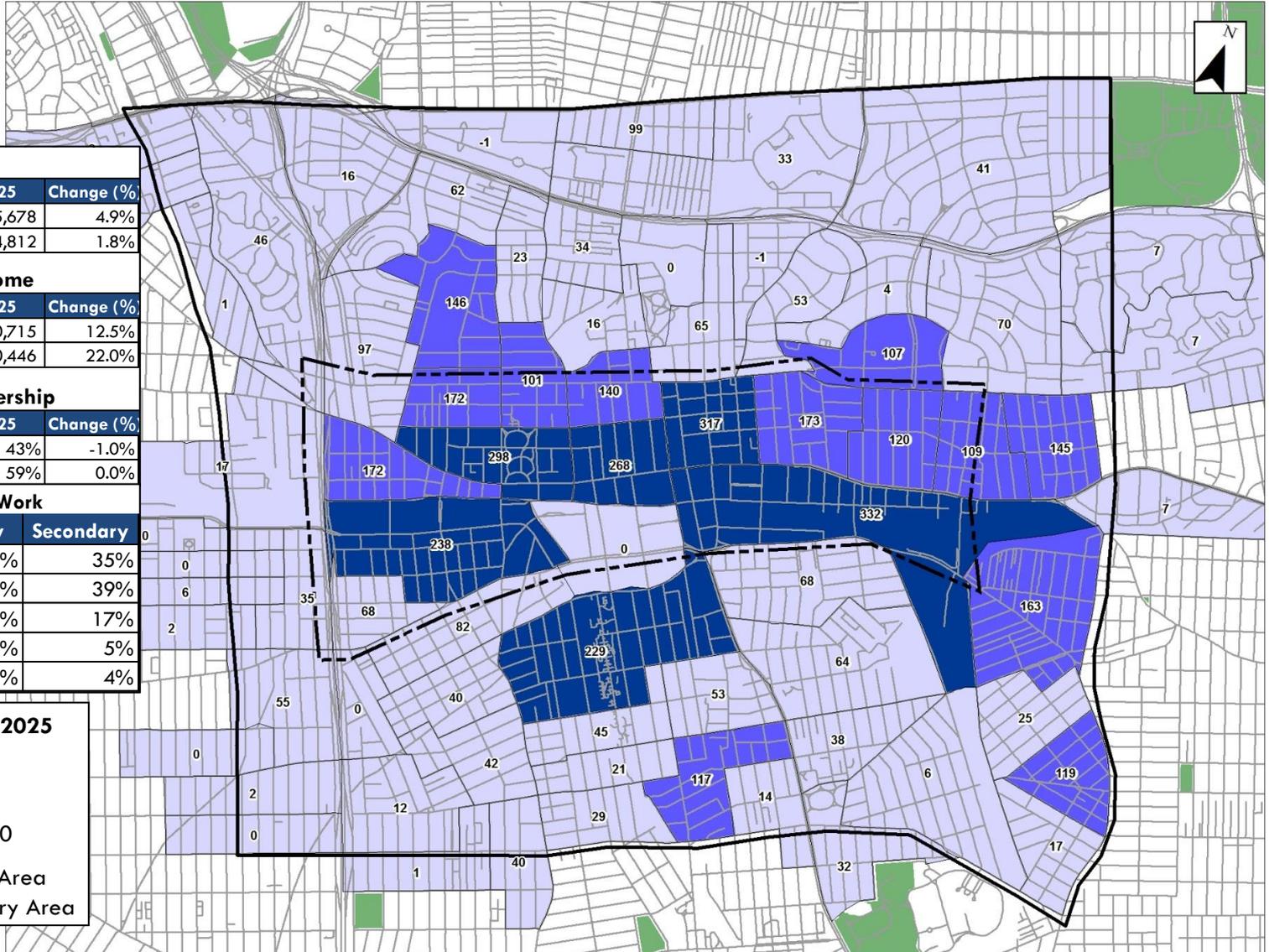
WEB PORTAL

- ❖ Create pickup/dropoff area near Sutphin/Archer station
- ❖ Bus only lanes on Jamaica Ave do not function as planned
- ❖ Gridlock at Archer Ave/Sutphin Bl is terrible esp. in PM peak
- ❖ **Parsons Bl/Jamaica Ave – most dangerous intersection in Downtown Jamaica**

IBZ SURVEY

- ❖ Douglas Ave is substandard east of 170th St
- ❖ Too much congestion on Sutphin Bl bet/ Liberty Ave & Hillside Ave
- ❖ Merrick Bl & Liberty Ave are problematic due to the number of commuter vans and buses
- ❖ Liberty Ave needs to be repaved
- ❖ Curb space for truck loading/unloading is needed

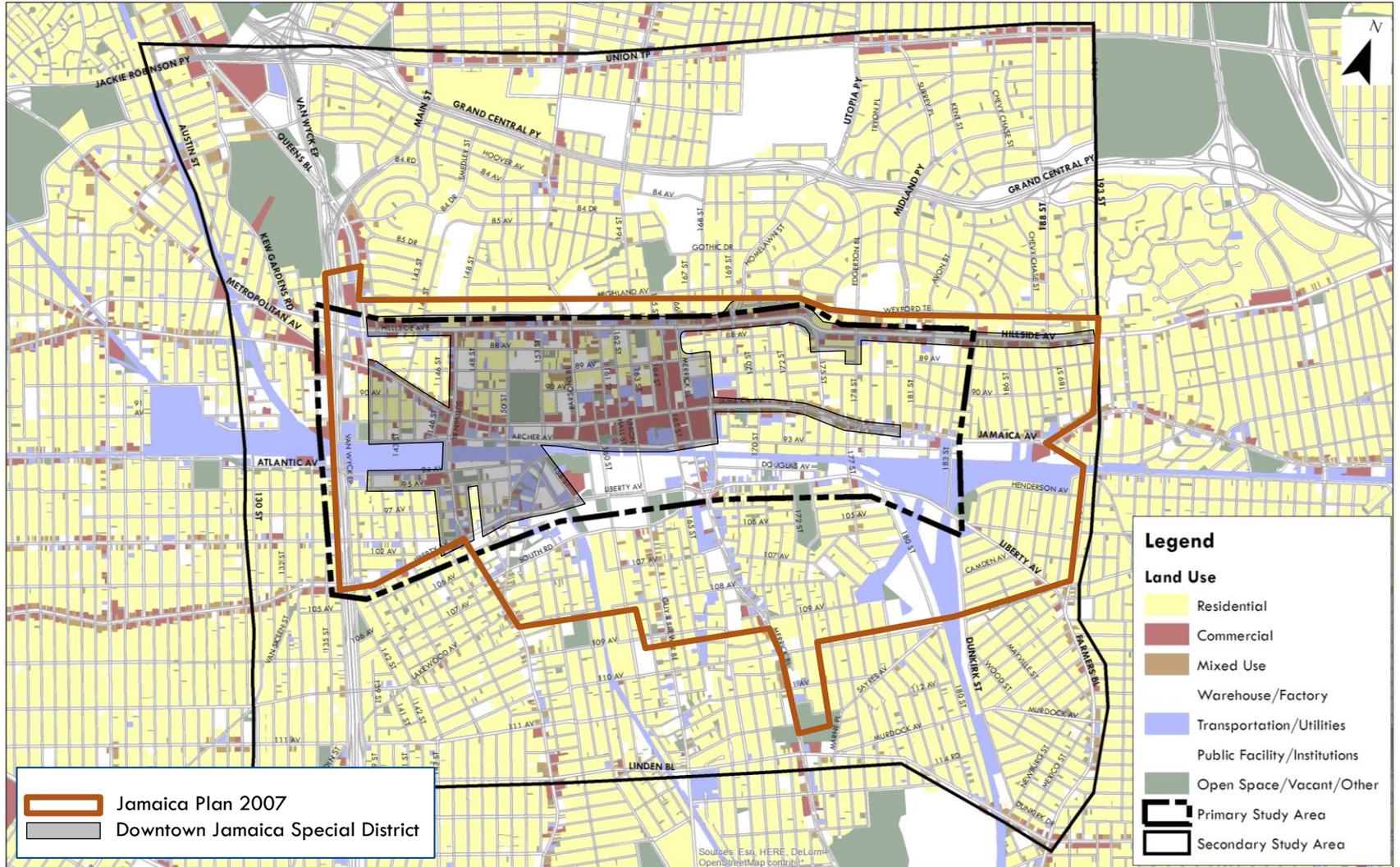
DEMOGRAPHICS & SOCIOECONOMICS



Population			
	2015	2025	Change (%)
Primary	53,076	55,678	4.9%
Secondary	132,487	134,812	1.8%
Median HH Income			
	2015	2025	Change (%)
Primary	\$ 45,072	\$ 50,715	12.5%
Secondary	\$ 57,720	\$ 70,446	22.0%
1+ Vehicle Ownership			
	2015	2025	Change (%)
Primary	44%	43%	-1.0%
Secondary	59%	59%	0.0%
2015 Journey To Work			
	Primary	Secondary	
Car	23%	35%	
Subway/Rail	48%	39%	
Bus	20%	17%	
Walk	7%	5%	
Other	2%	4%	

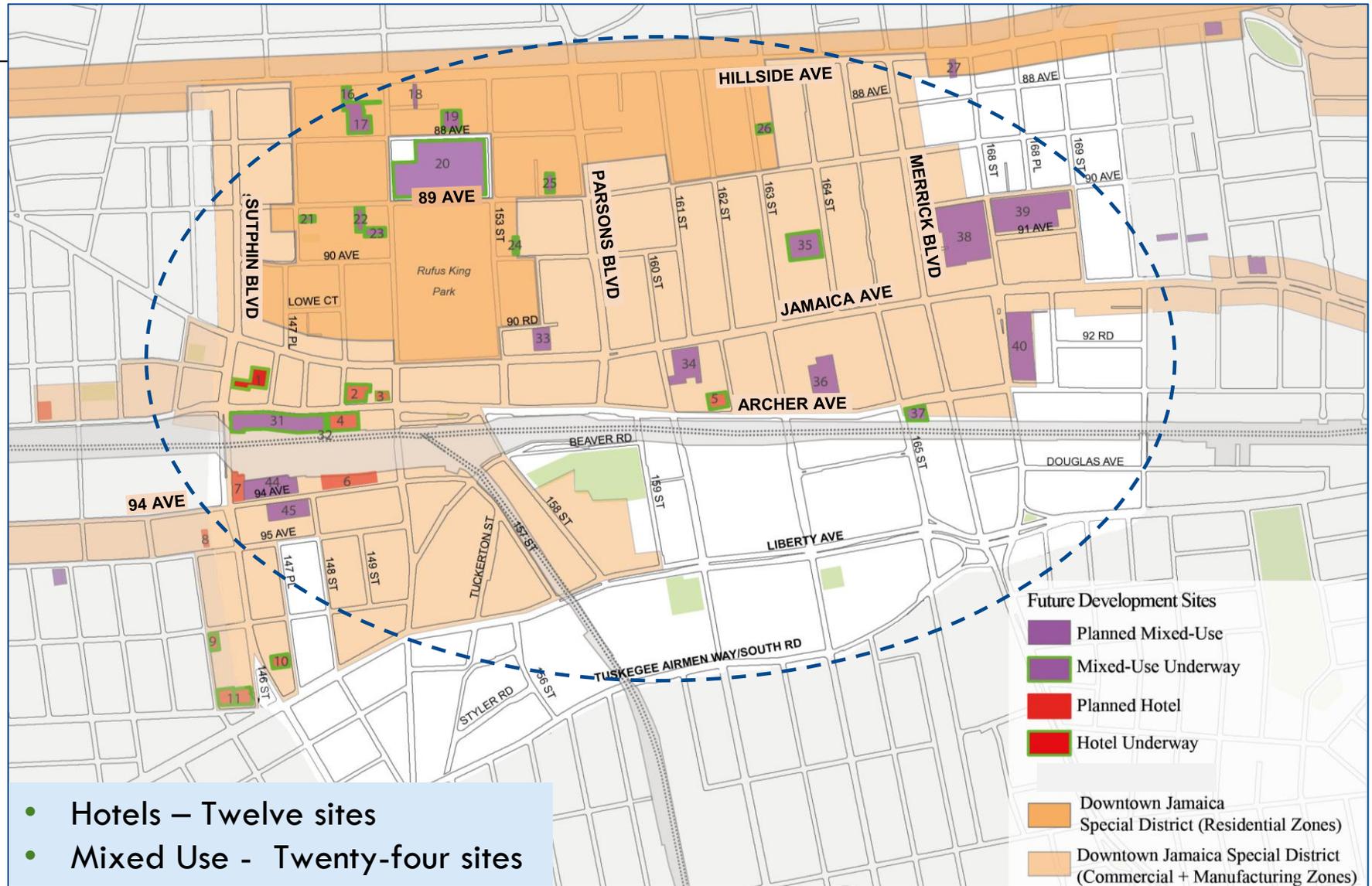
Pop Change 2015-2025	
	0 - 100
	101-200
	201 - 350
	Primary Area
	Secondary Area

LAND USE



Sources: Esri, HERE, DeLorme, OpenStreetMap contributors

FUTURE DEVELOPMENT SITES



NEW DEVELOPMENTS

The Crossing at Jamaica Station
670 DU's + Ground Floor Retail



92-61 165th St
88 DU's + Ground Floor Retail



92-33 168th St
389 DU's + Ground Floor Retail



160-16 Jamaica Ave
150K sq ft Commercial



Mary Immaculate Hospital Campus
320 DU's



Hilton Inn
240 Rooms



148-18 Archer Ave
500 Rooms



92-18 150th St
80 Rooms

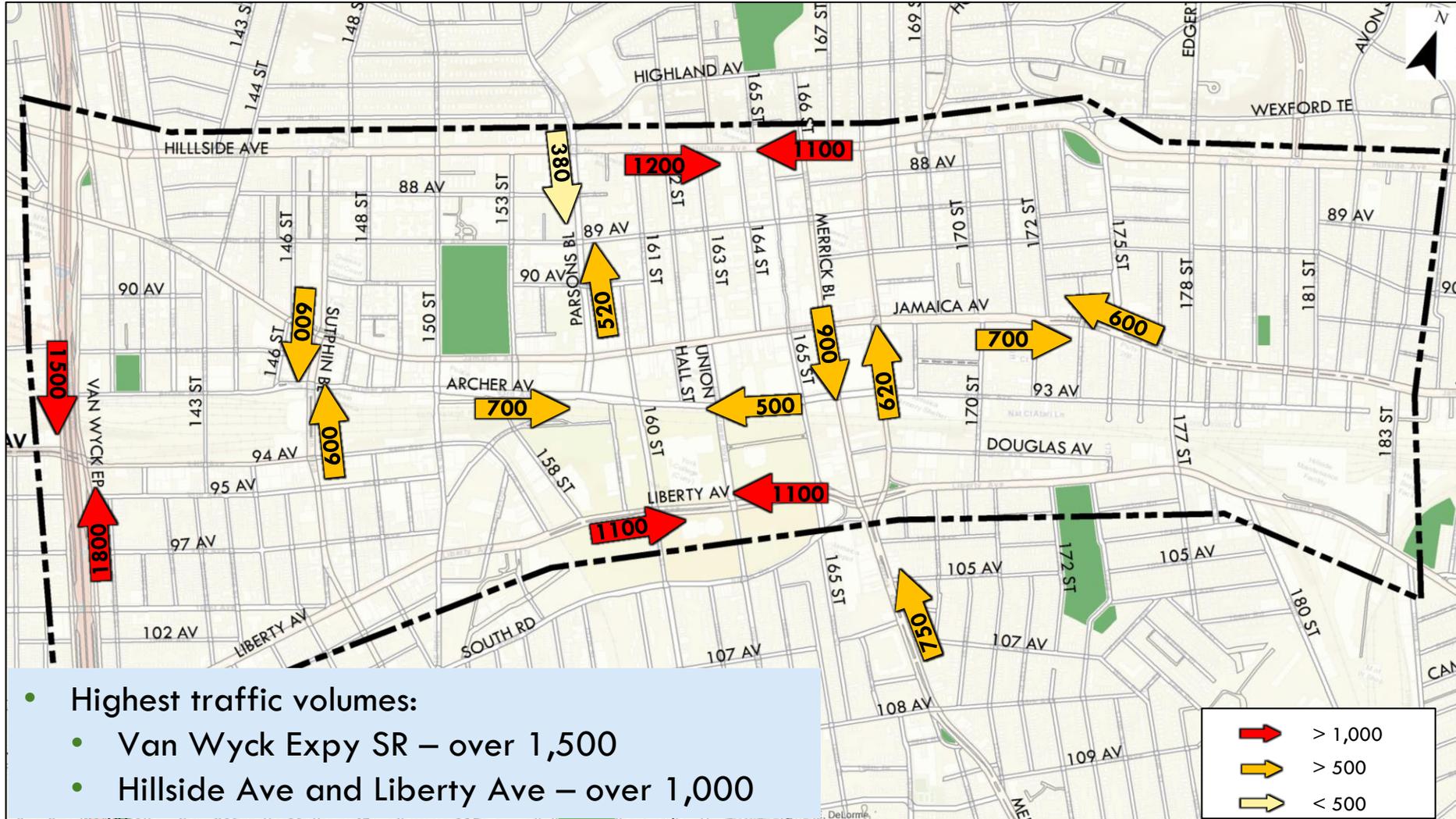


Detailed Traffic Analysis

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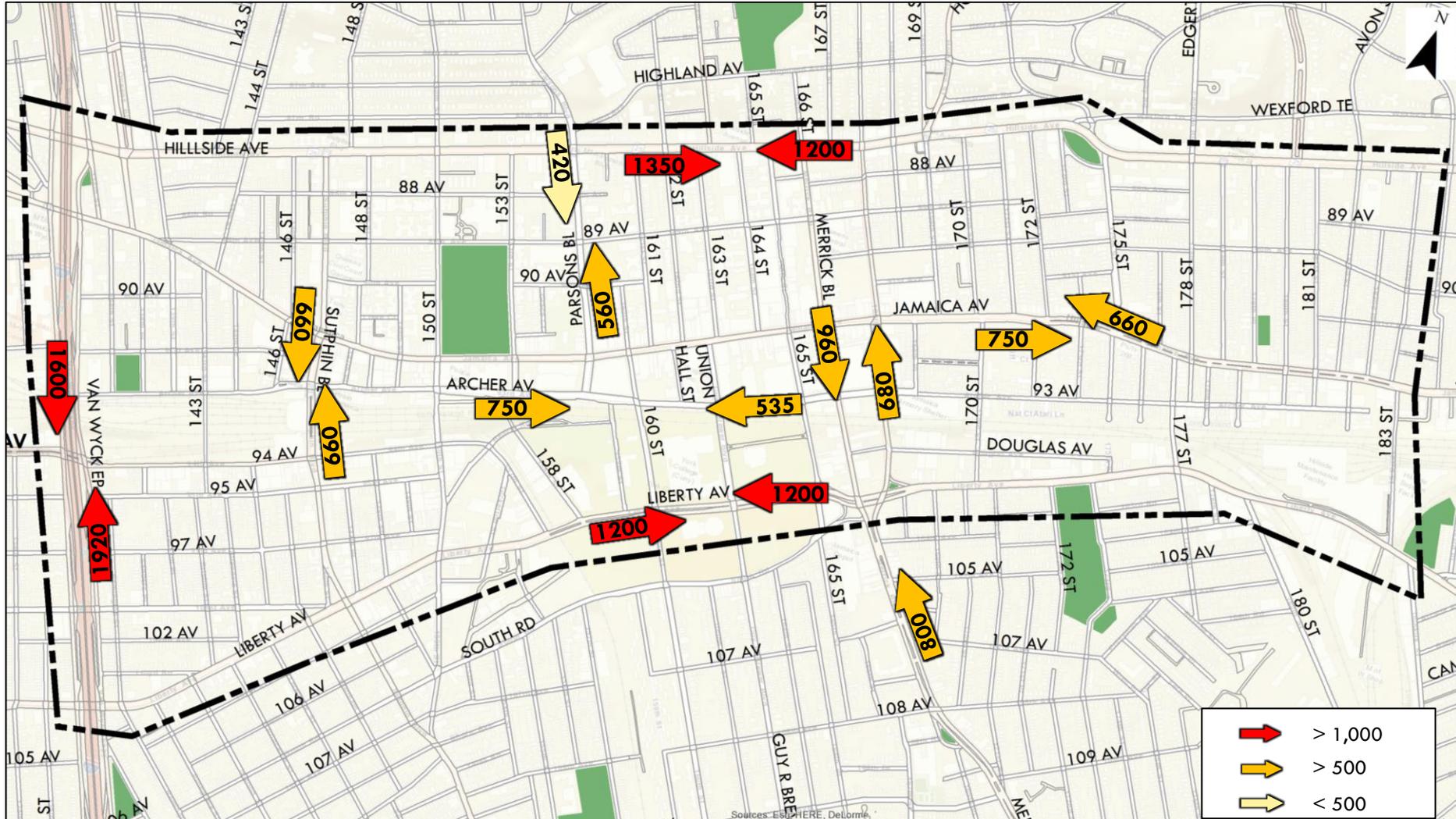
TRAFFIC

PM PEAK HOUR APPROACH VOLUME - EXISTING



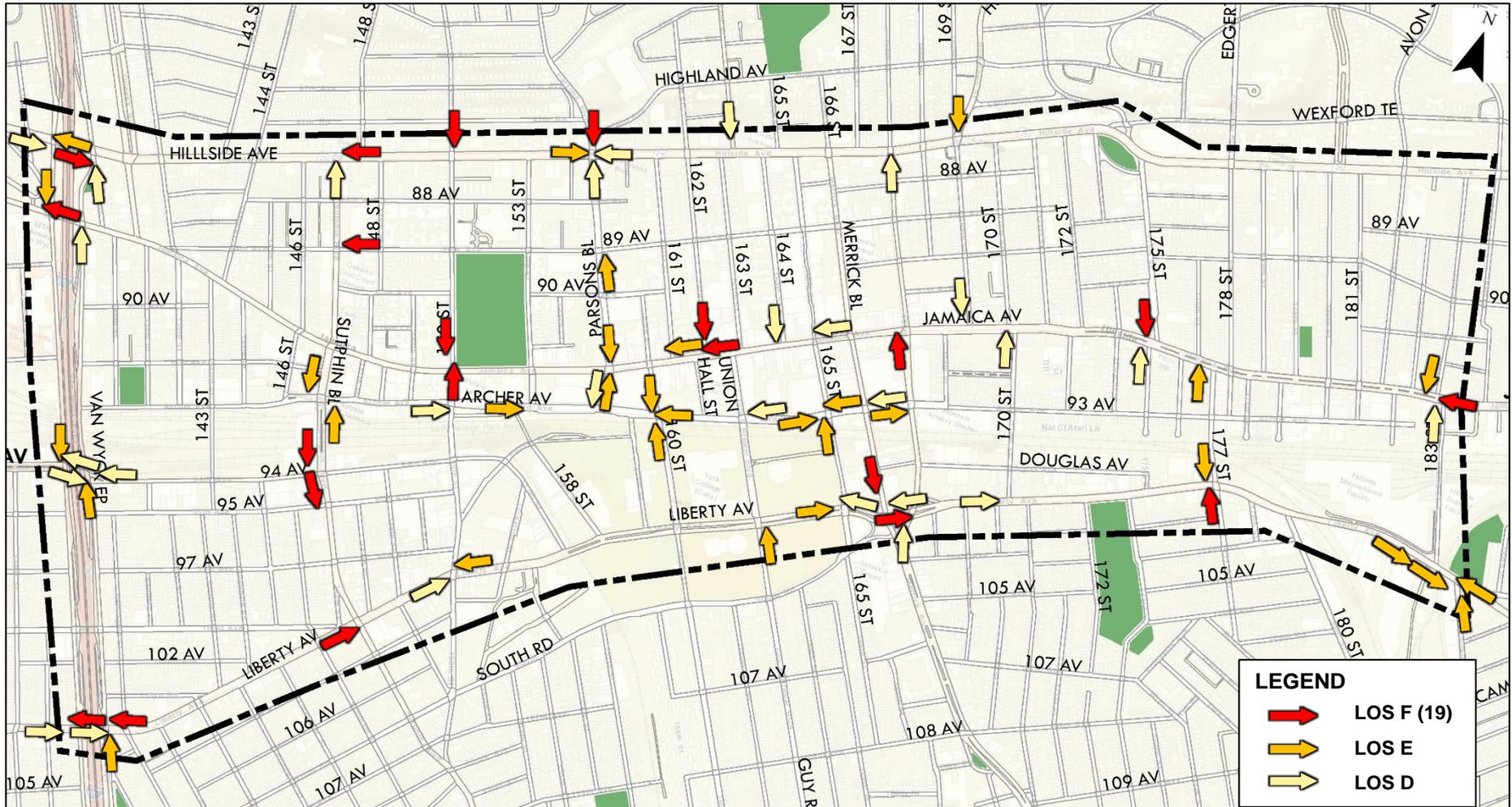
TRAFFIC

PM PEAK HOUR APPROACH VOLUME - FUTURE



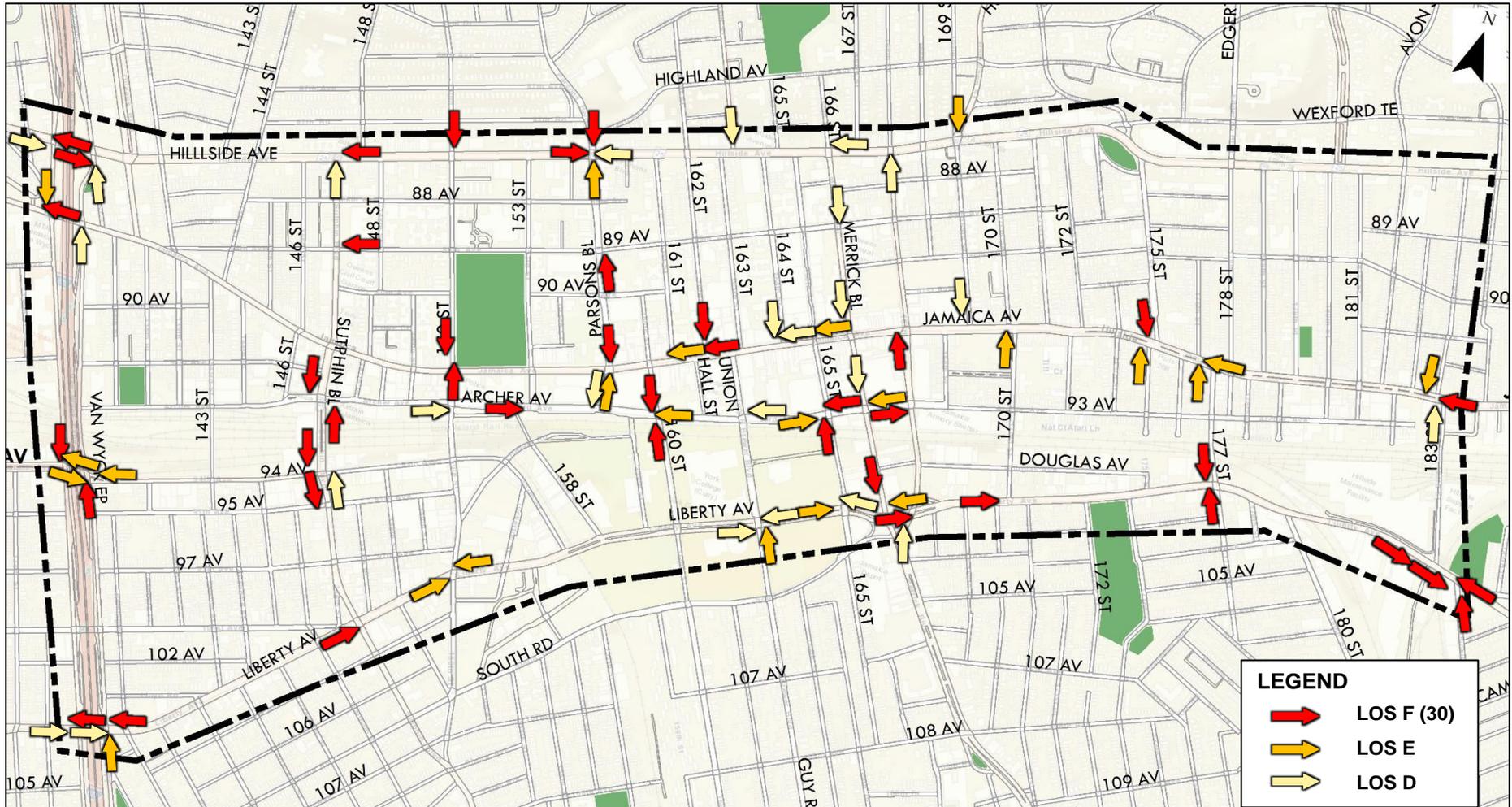
TRAFFIC

PM PEAK HOUR APPROACH LOS - EXISTING

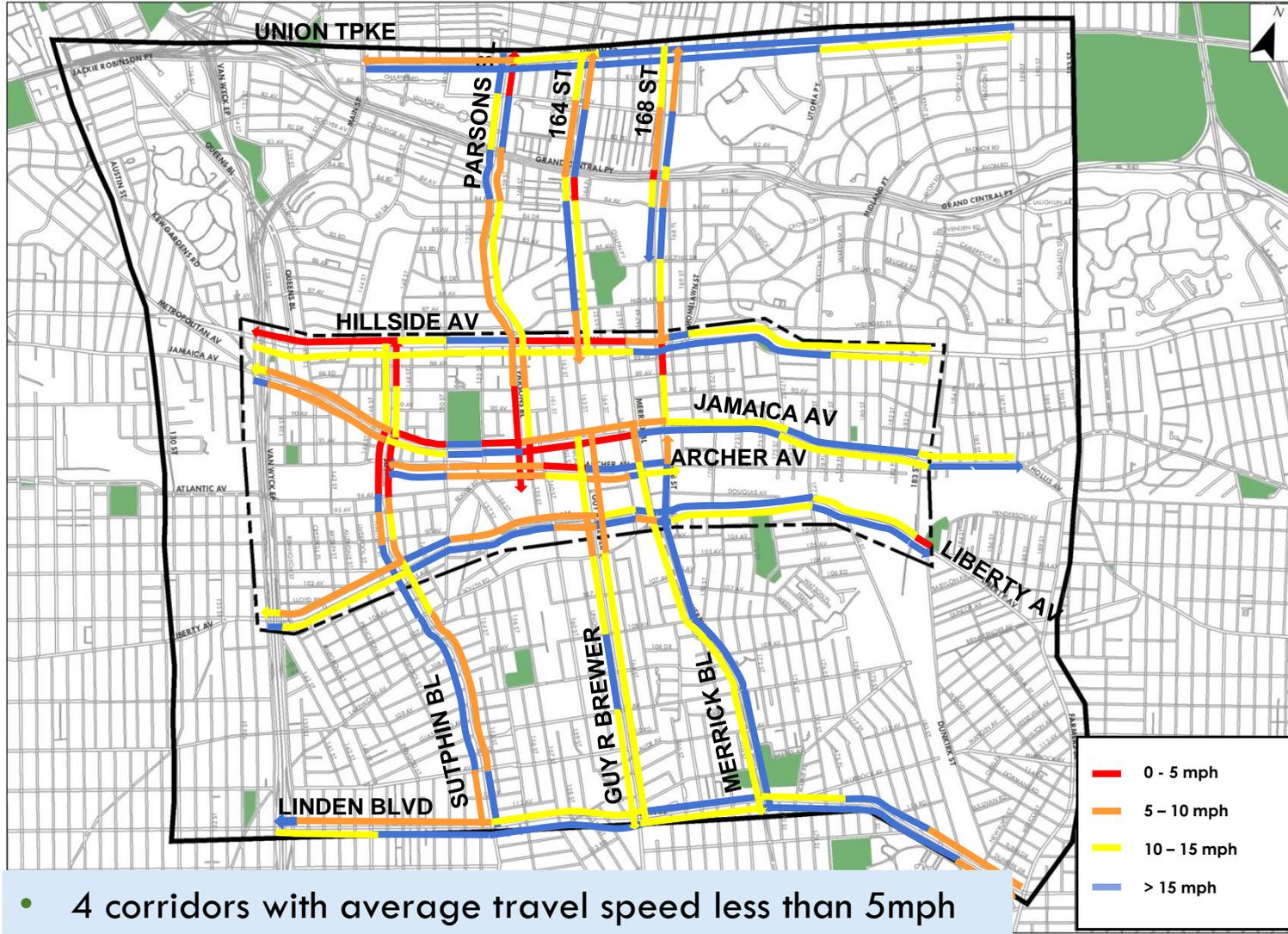


TRAFFIC

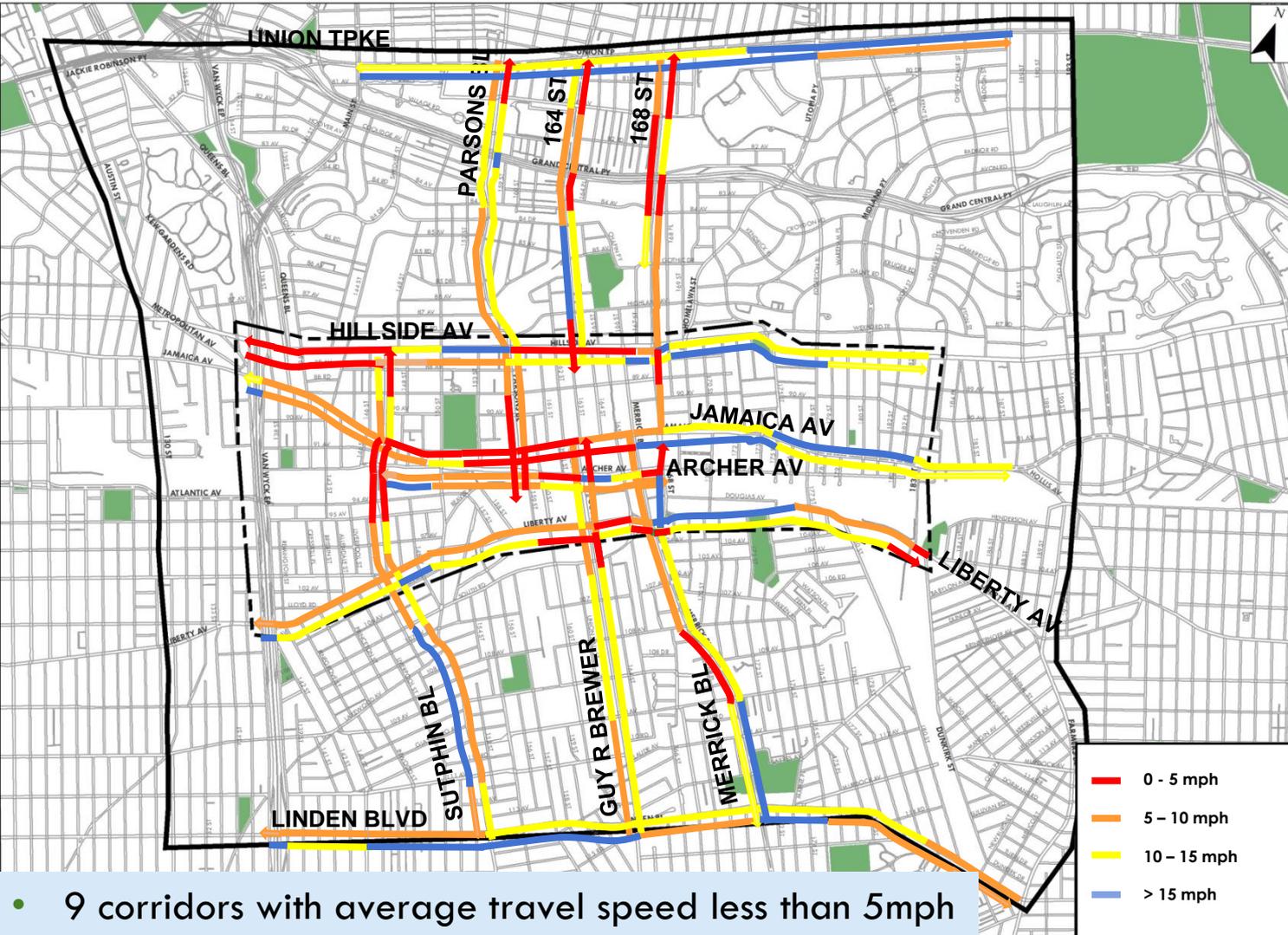
PM PEAK HOUR APPROACH LOS - FUTURE



PM PEAK CORRIDOR TRAVEL SPEED – EXISTING

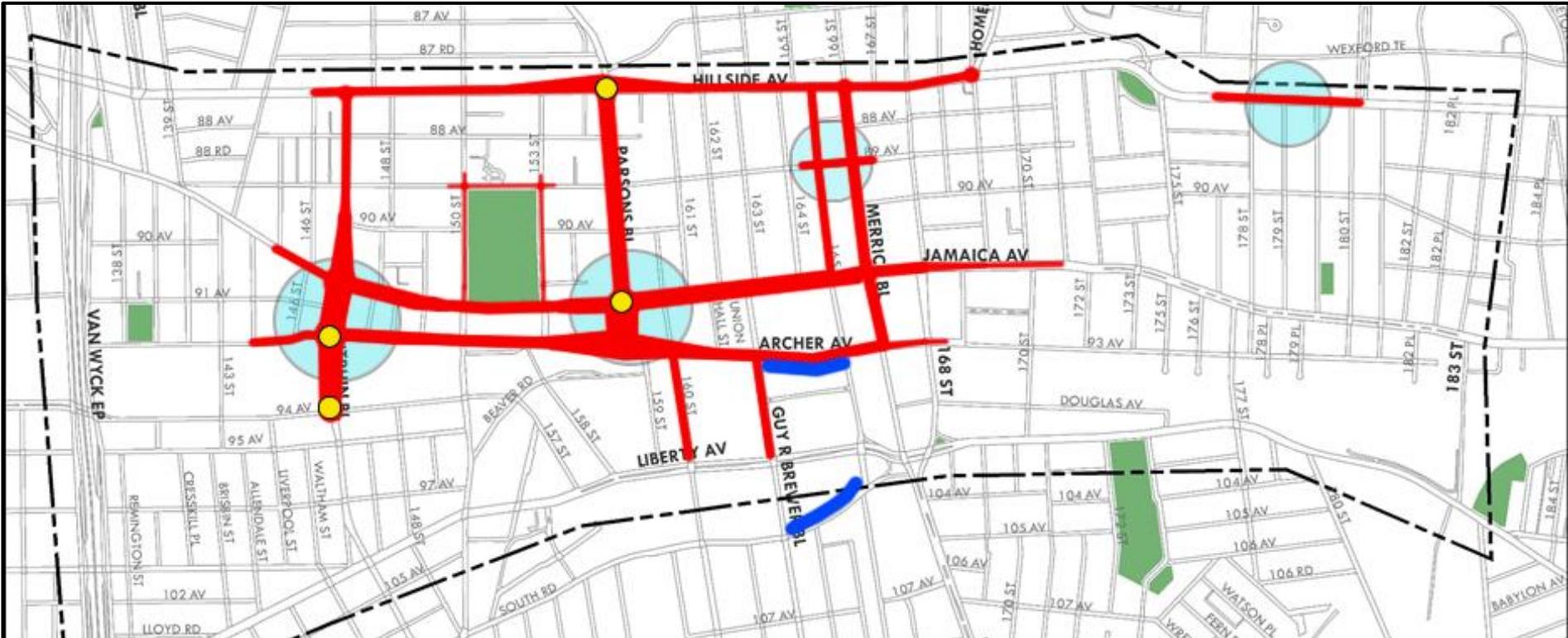


PM PEAK CORRIDOR TRAVEL SPEED – FUTURE



• 9 corridors with average travel speed less than 5mph

PEDESTRIAN ISSUES



- PED LOS D/E
- Narrow/No Sidewalk
- Transit Hub
- 200 Persons/Hr
- 500 Persons/Hr
- 1,000 Persons/Hr



HIGH PEDESTRIAN DENSITY



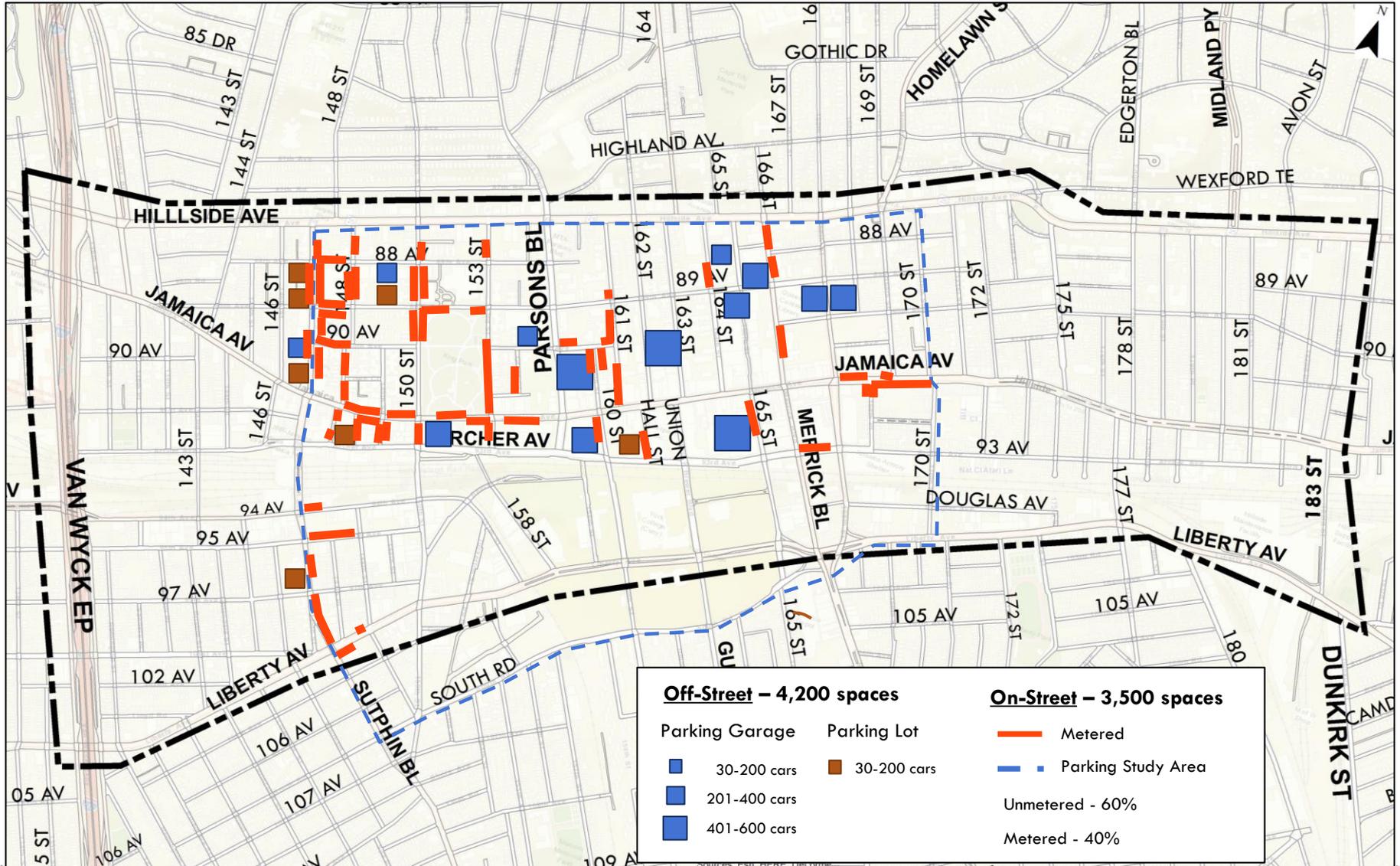
NARROW SIDEWALKS



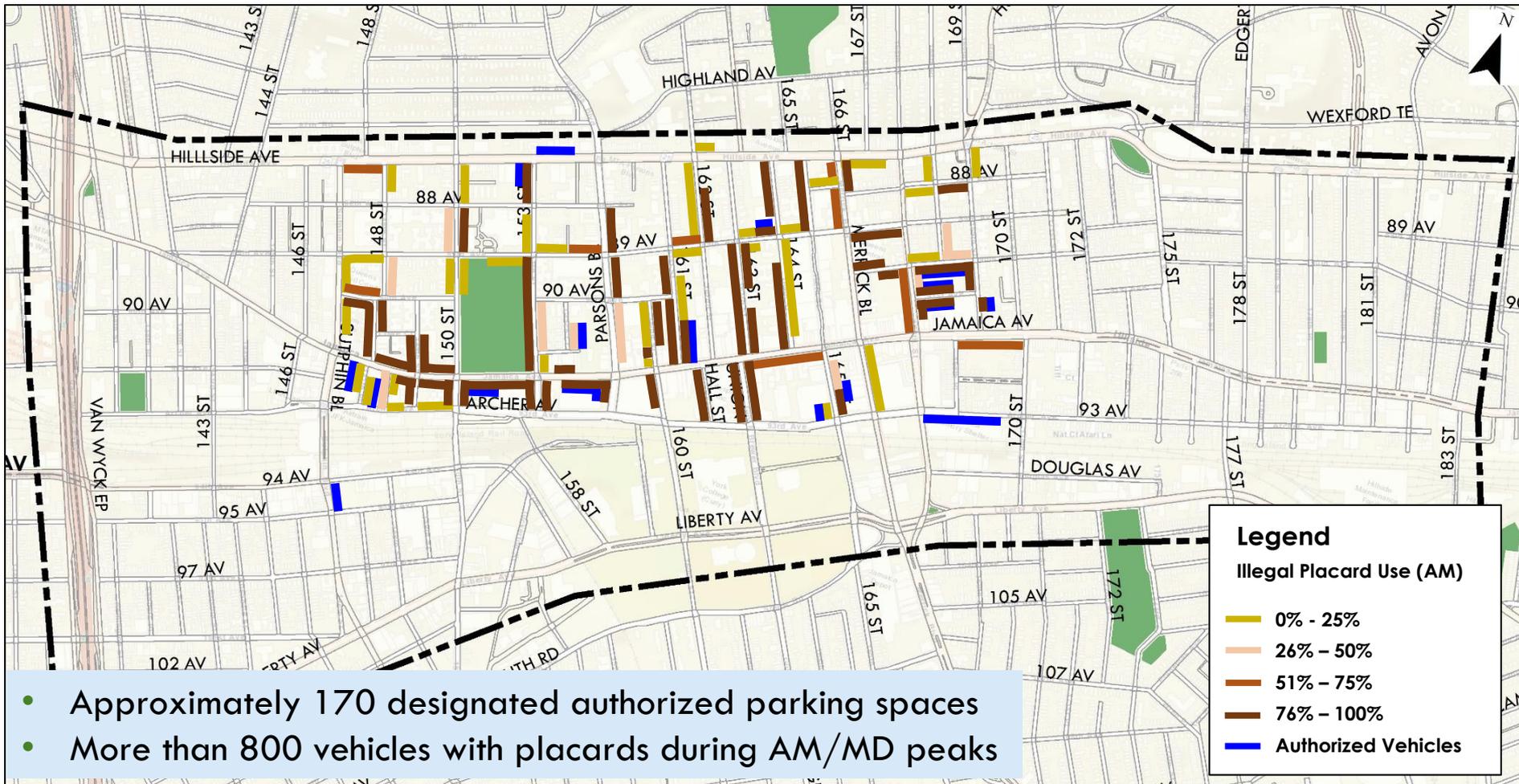
MISSING SIDEWALK

PARKING

ON-STREET/OFF-STREET

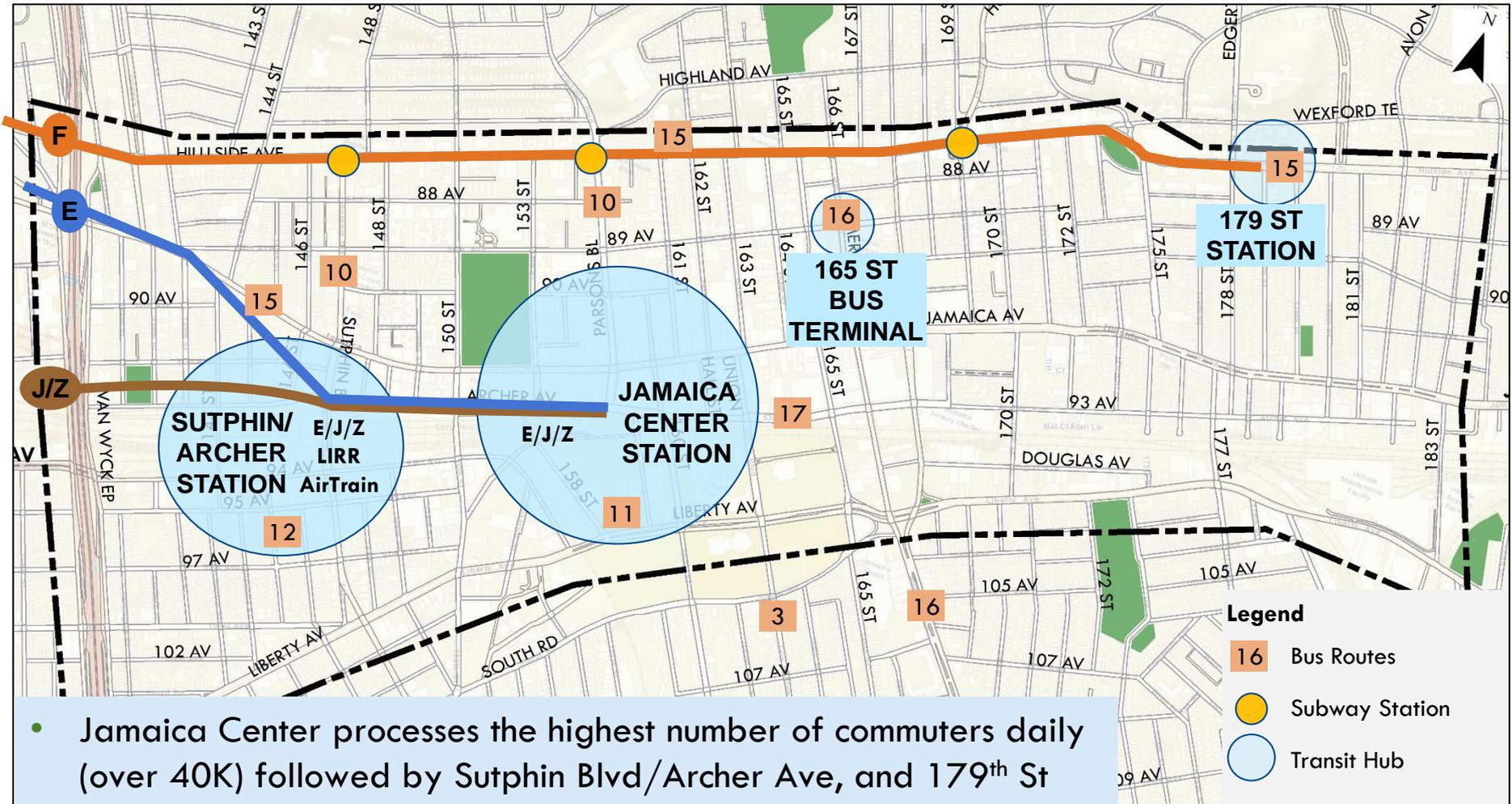


PARKING ILLEGAL PLACARD USE



TRANSIT NETWORK/SERVICE

SUBWAY, LIRR, AIRTRAIN, & BUS

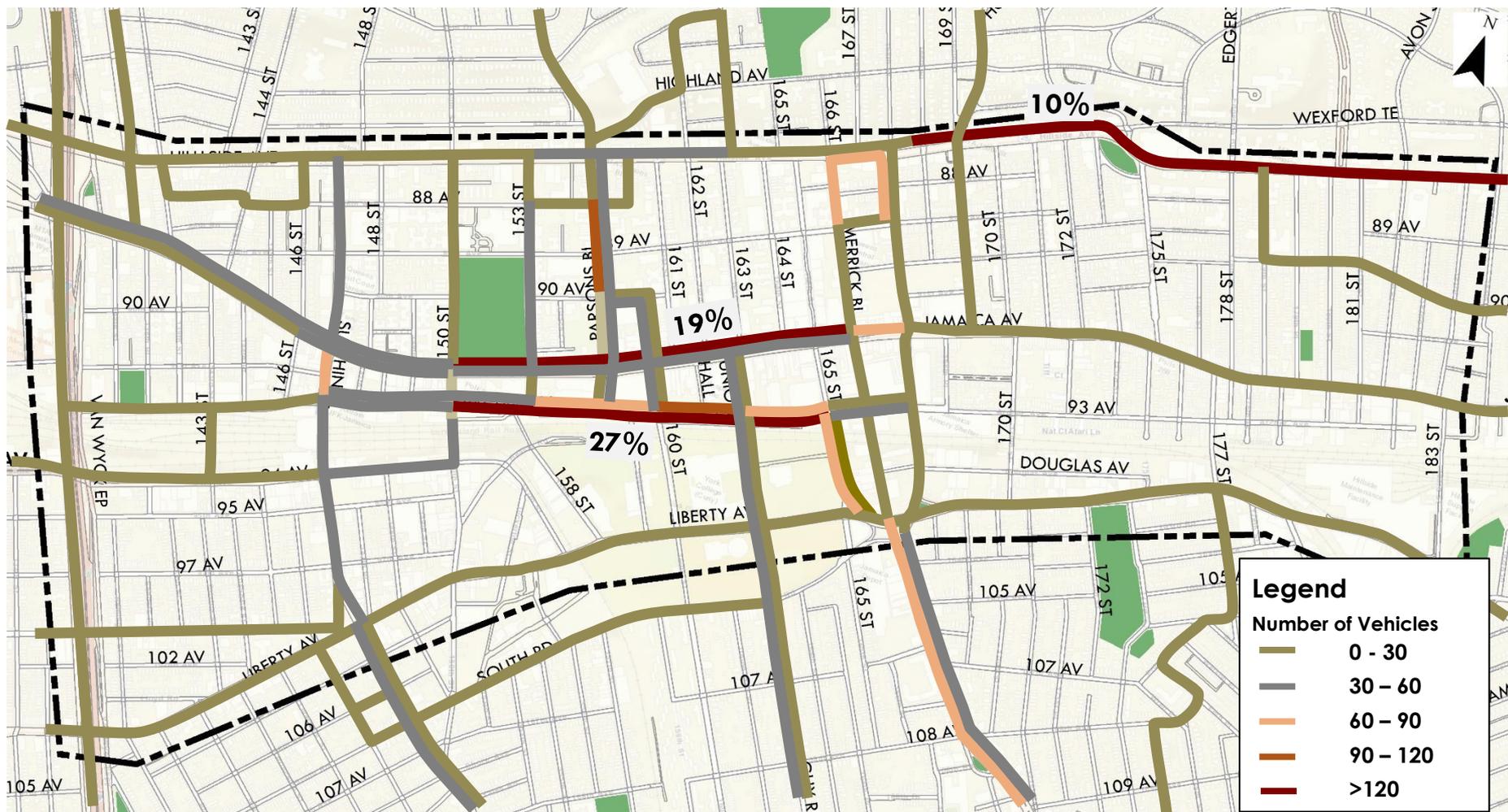


- Jamaica Center processes the highest number of commuters daily (over 40K) followed by Sutphin Blvd/Archer Ave, and 179th St

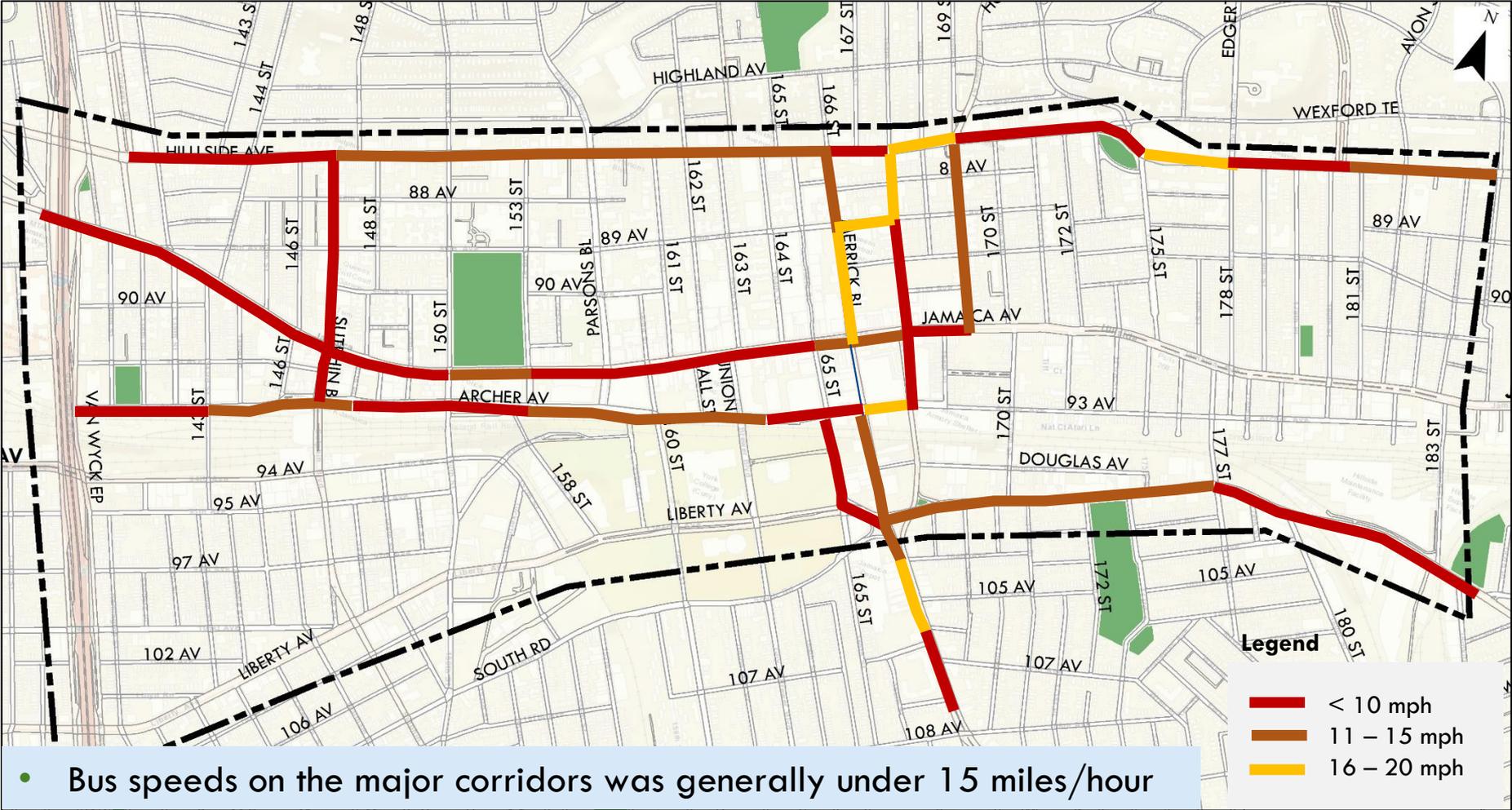
Legend

- 16 Bus Routes
- Subway Station
- Transit Hub

PM BUS VOLUME & PERCENTAGE OF TRAFFIC

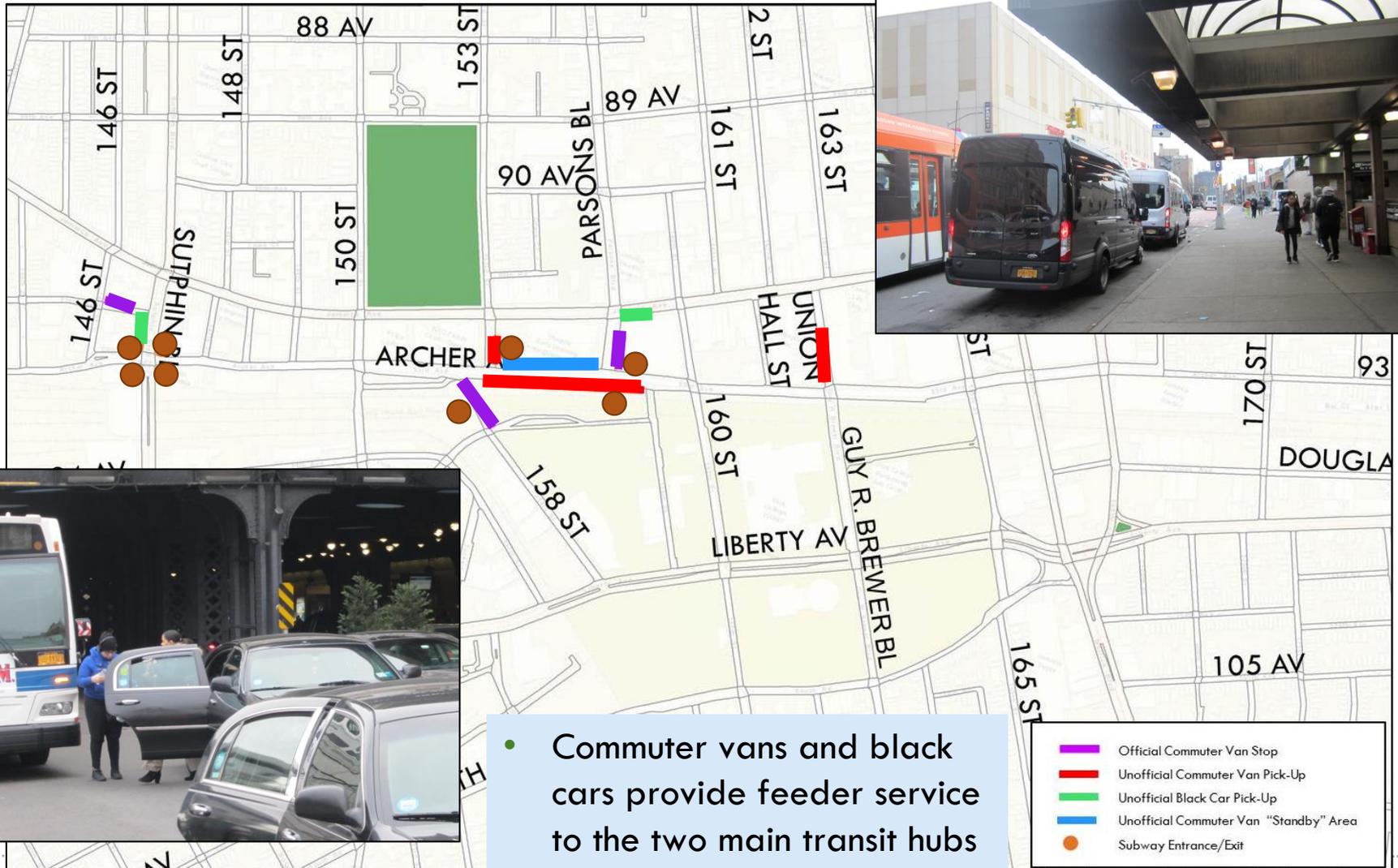


AM BUS SPEEDS



TRANSIT SERVICE

COMMUTER VANS & BLACK CARS



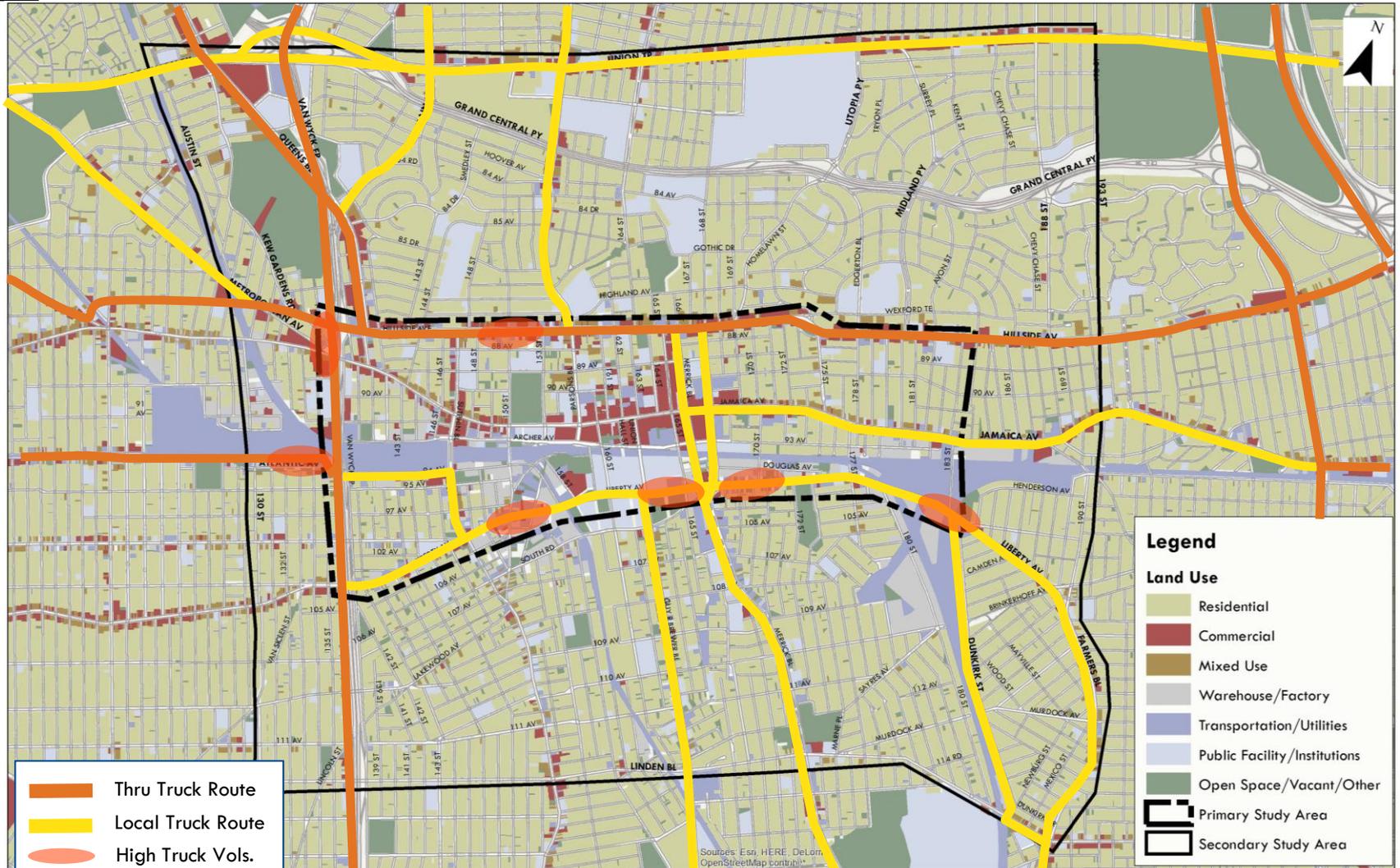
Commuter vans and black cars provide feeder service to the two main transit hubs

CRASHES (2013-2016)



TRUCKS/GOODS MOVEMENT

TRUCK ROUTES



VISSIM SIMULATION

EXISTING CONDITIONS



Archer Av



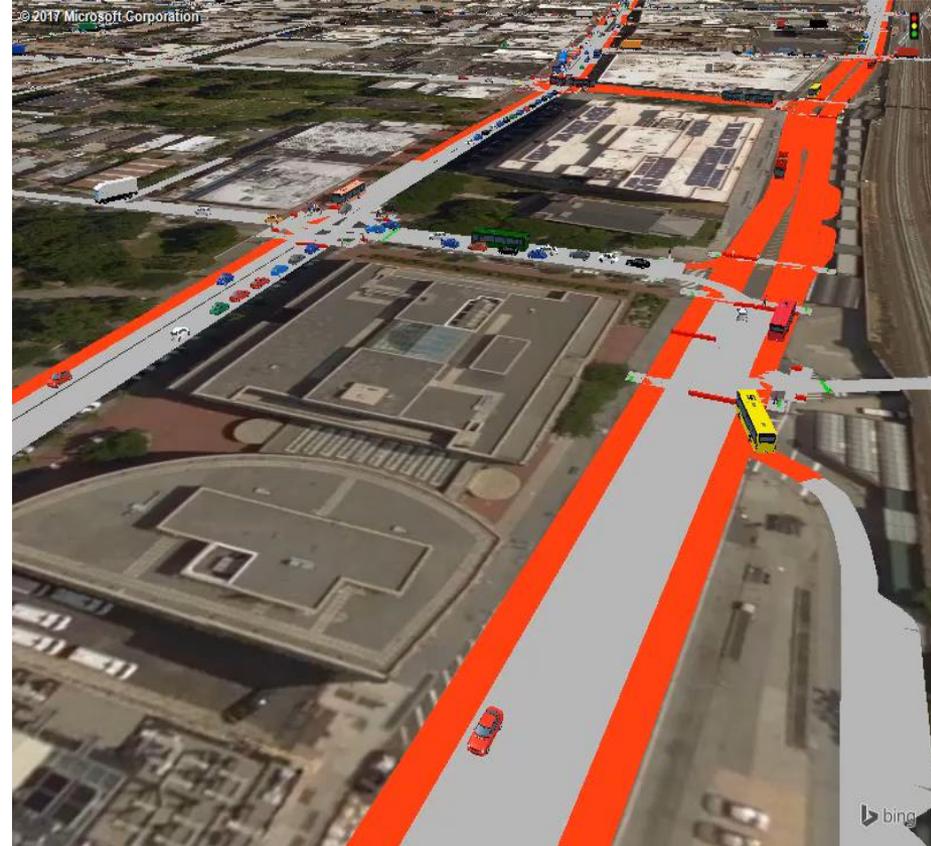
Sutphin Blvd

VISSIM SIMULATION

FUTURE CONDITIONS & OTHER SCENARIOS



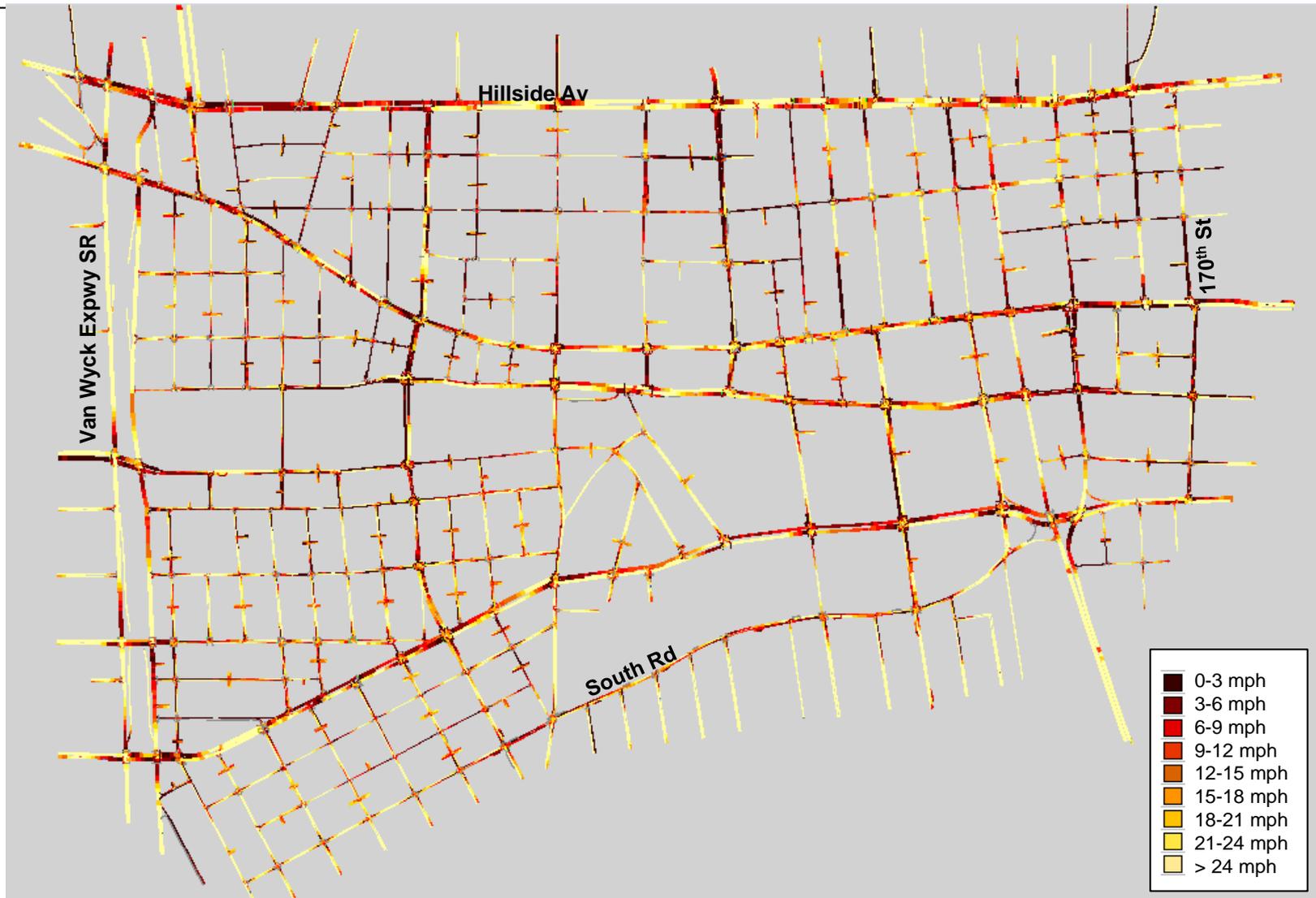
Parsons Blvd/Archer Av
Future Conditions



Parsons Blvd/Archer Av
Future Conditions with Archer Av between 153rd St and 160th St Transit Only

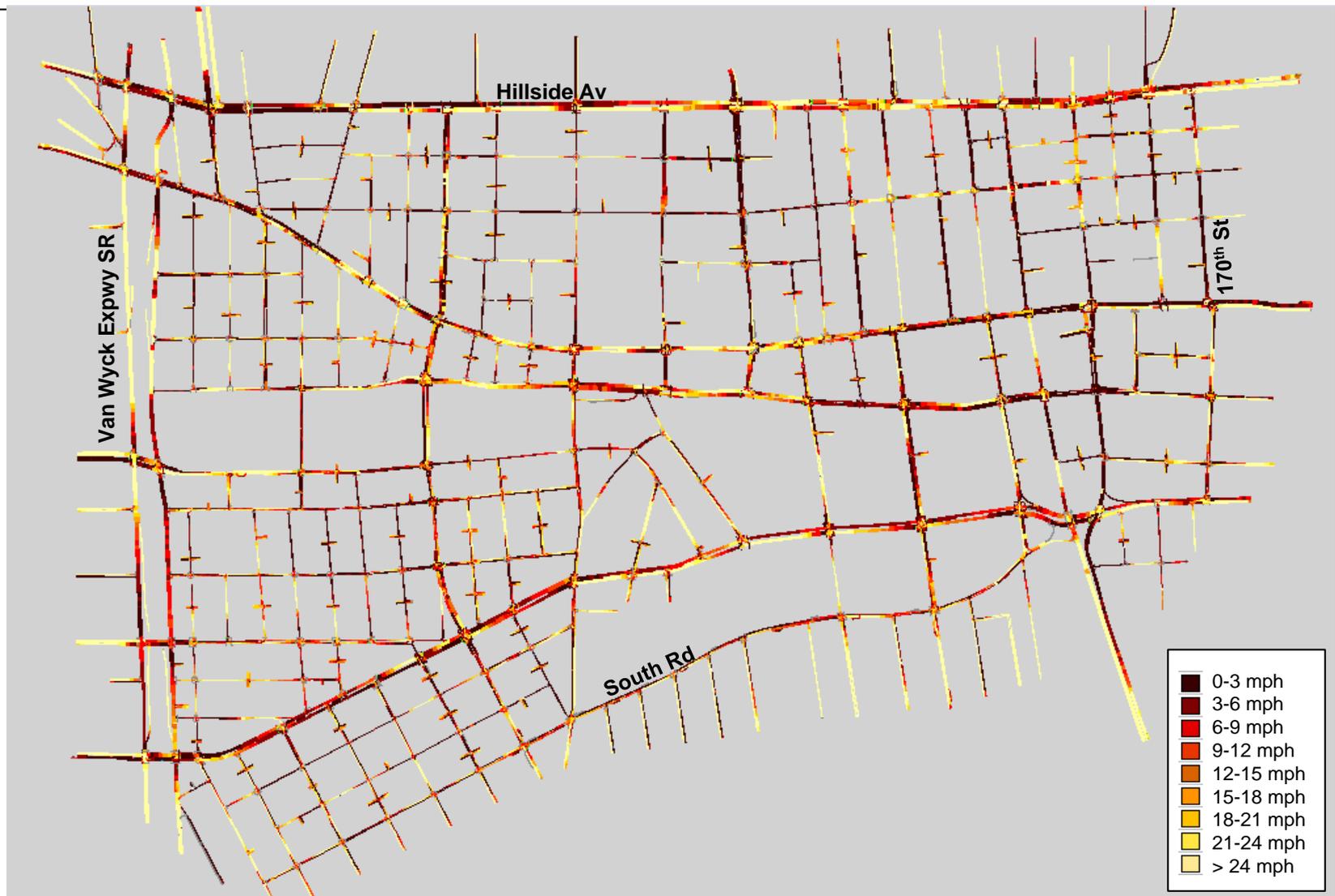
VISSIM SIMULATION NETWORK

AVERAGE TRAVEL SPEED – Existing PM PEAK



VISSIM SIMULATION NETWORK

AVERAGE TRAVEL SPEED – Future PM PEAK



Issues Identification & Problem Definition

4

TRAFFIC & TRANSPORTATION ISSUES



Queues/Congestion



Heavy Bus Traffic



Commuter Vans



Narrow Two-way Streets



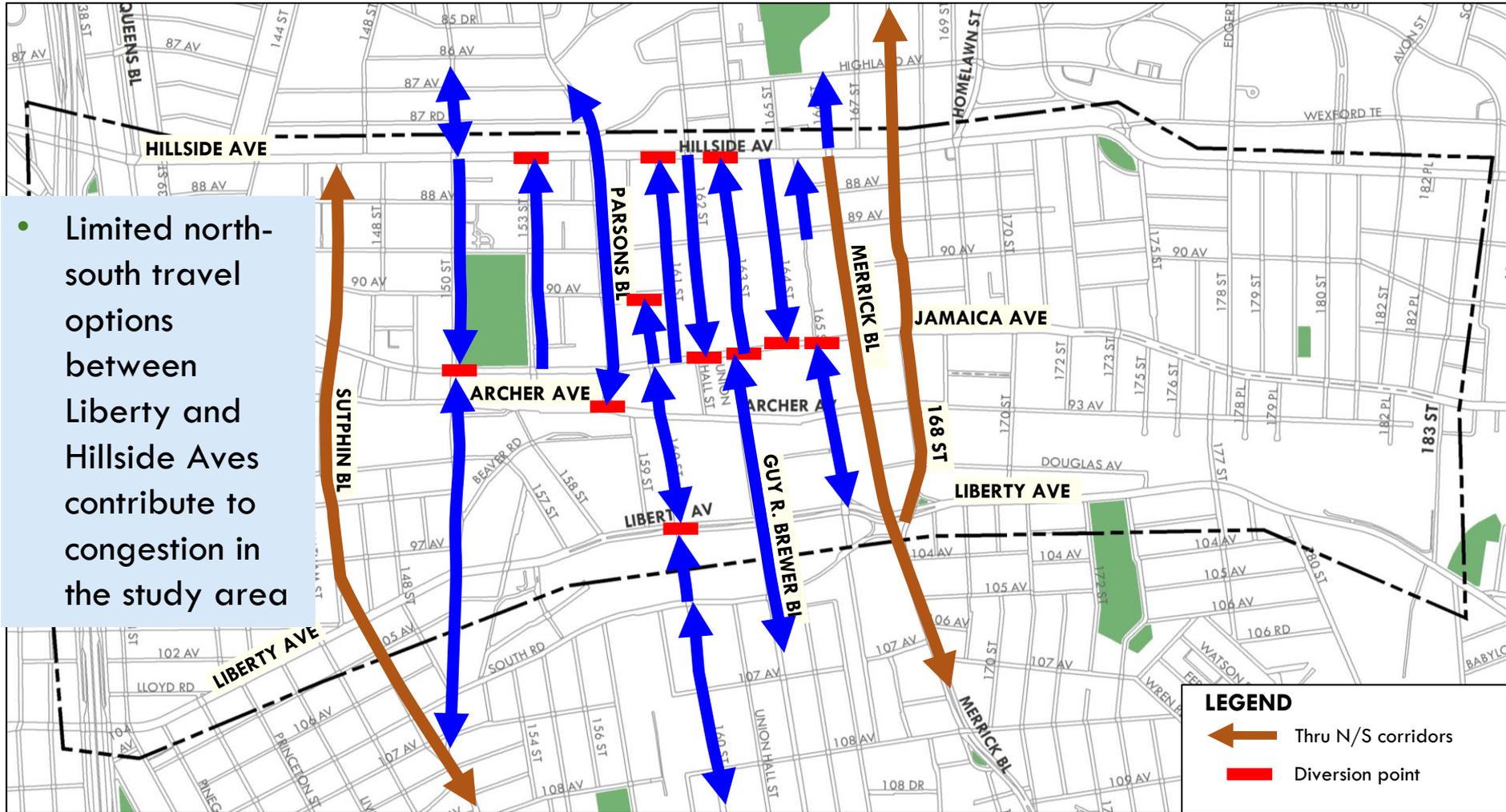
**High Volume of Surface
Transit Commuters**



**High Parking Demand/
Placard Abuse**

TRAFFIC NETWORK CONFIGURATION

NORTH/SOUTH CONNECTIVITY

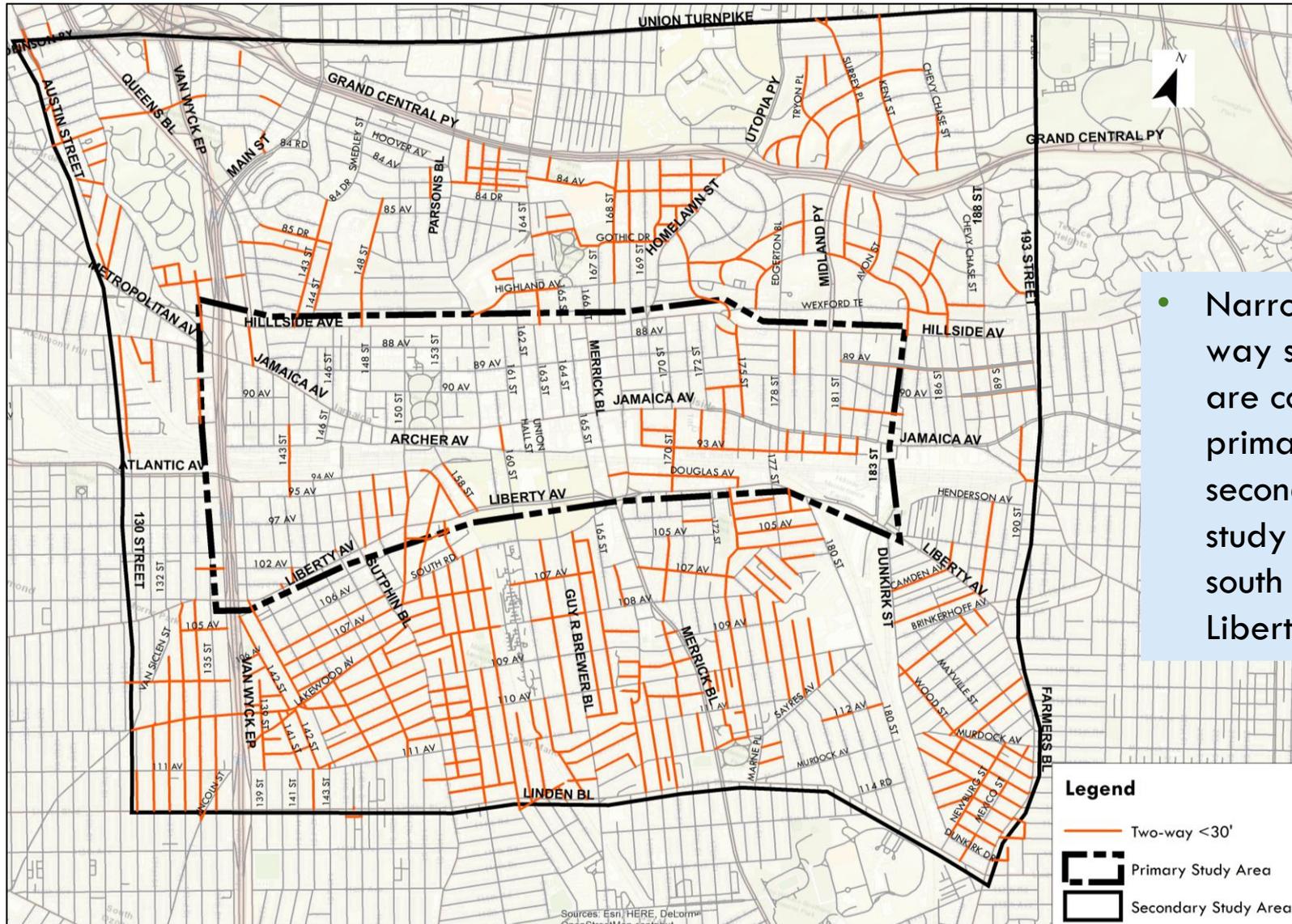


- Limited north-south travel options between Liberty and Hillside Aves contribute to congestion in the study area

LEGEND

- ← Thru N/S corridors
- Diversion point

NARROW TWO-WAY STREETS

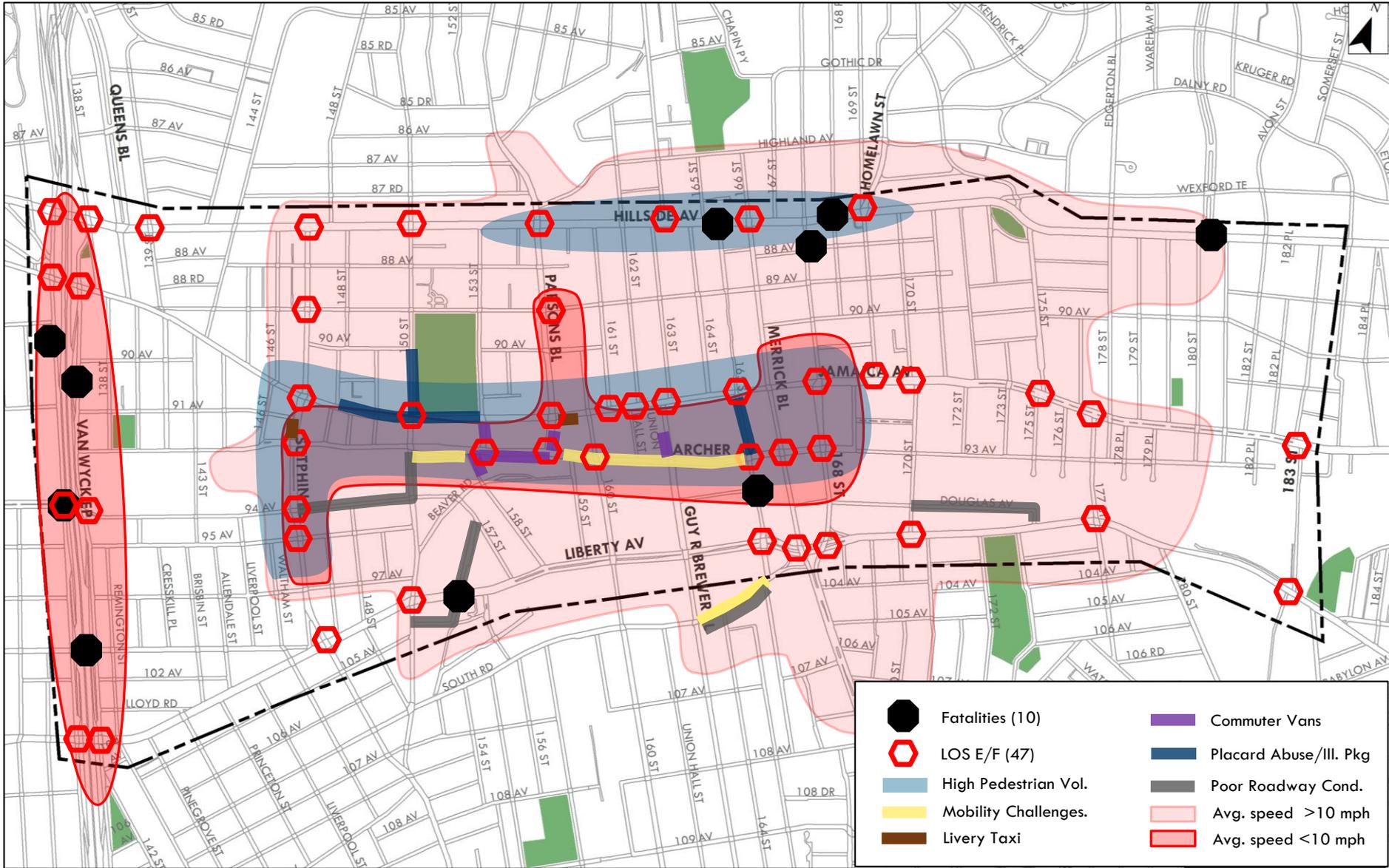


- Narrow two-way streets are common, primarily in the secondary study area, south of Liberty Ave

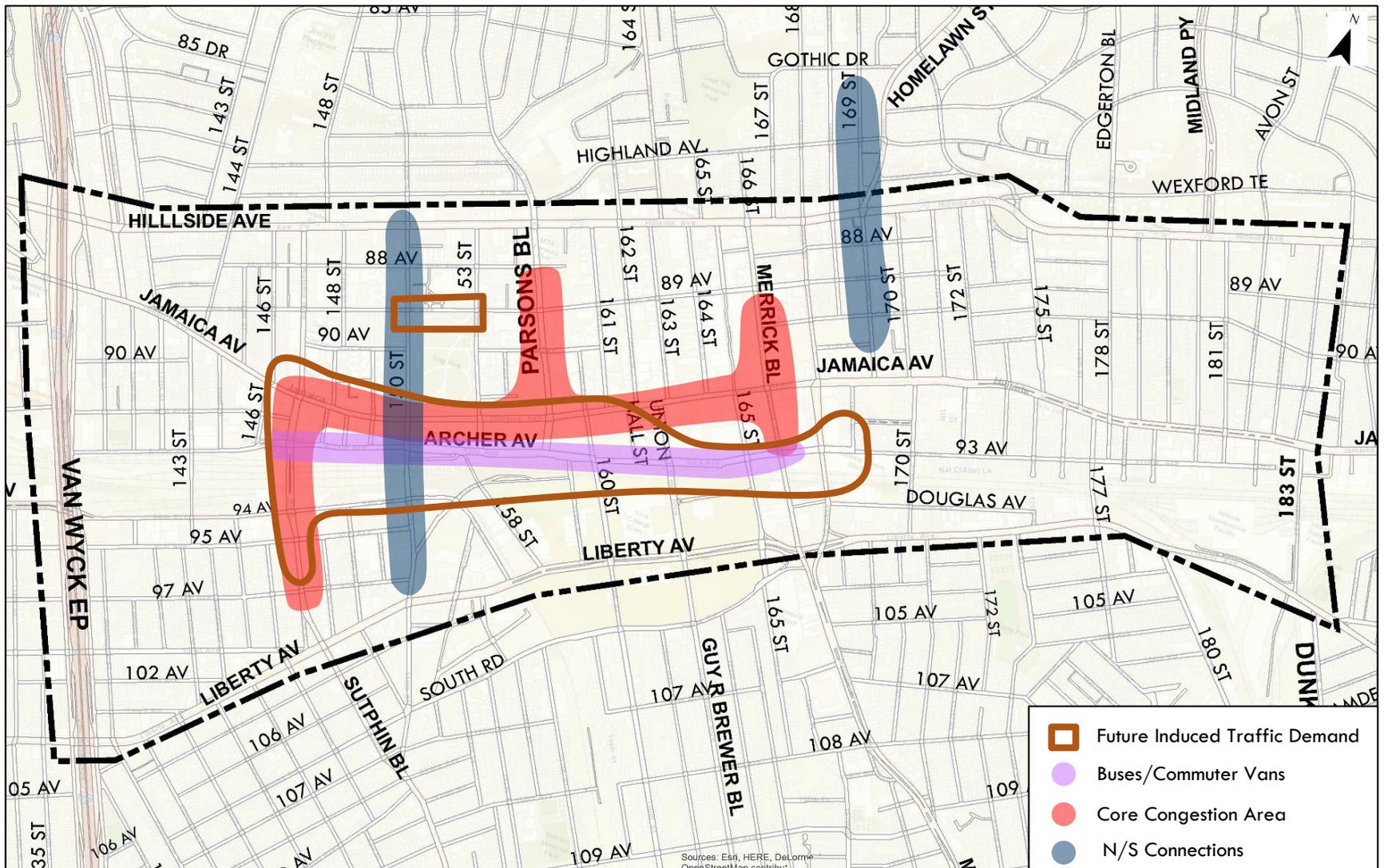
Recommendations & Improvement Measures

5

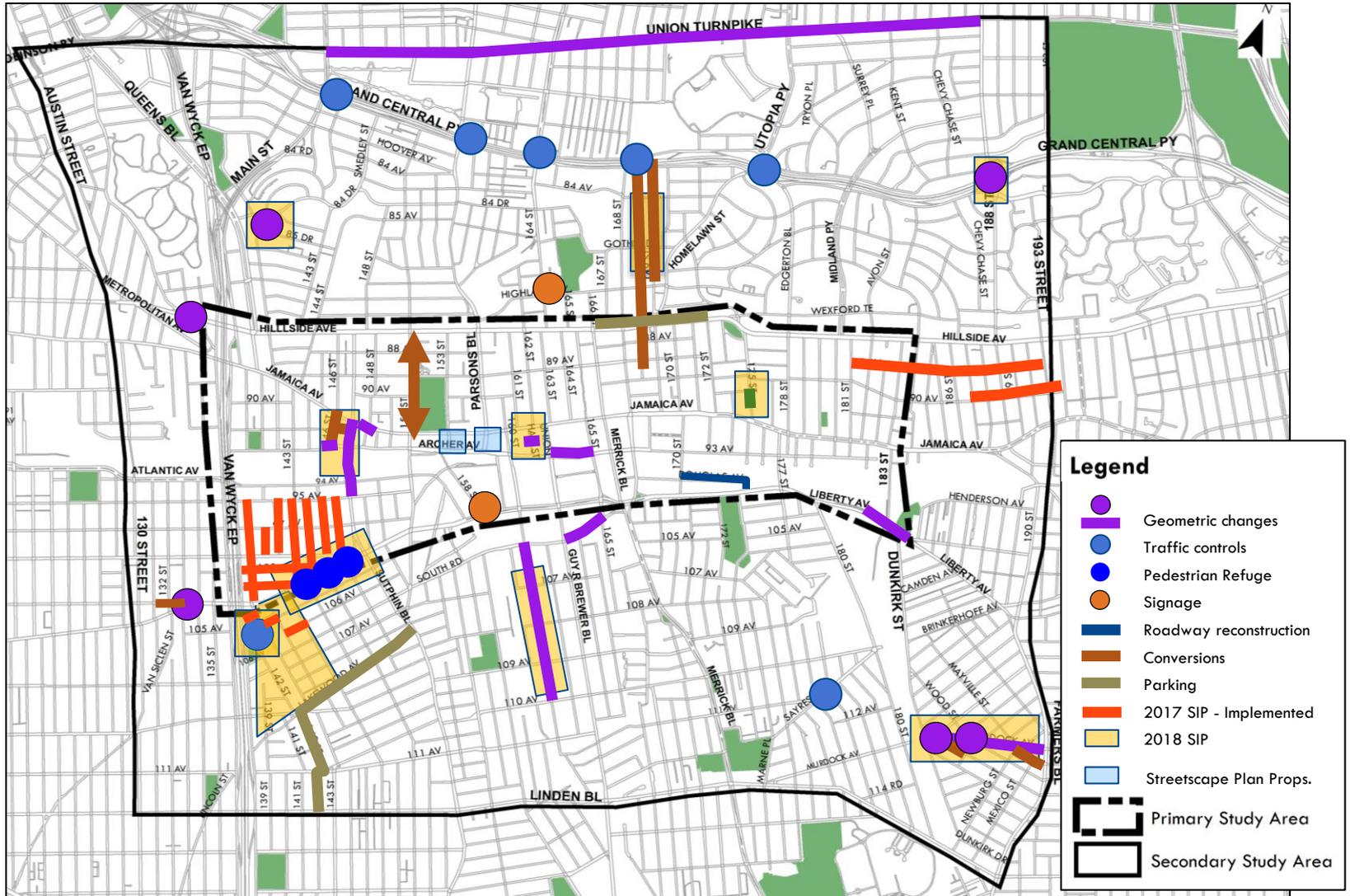
SYNTHESIS OF ISSUES



CRITICAL IMPROVEMENT FOCUS AREAS



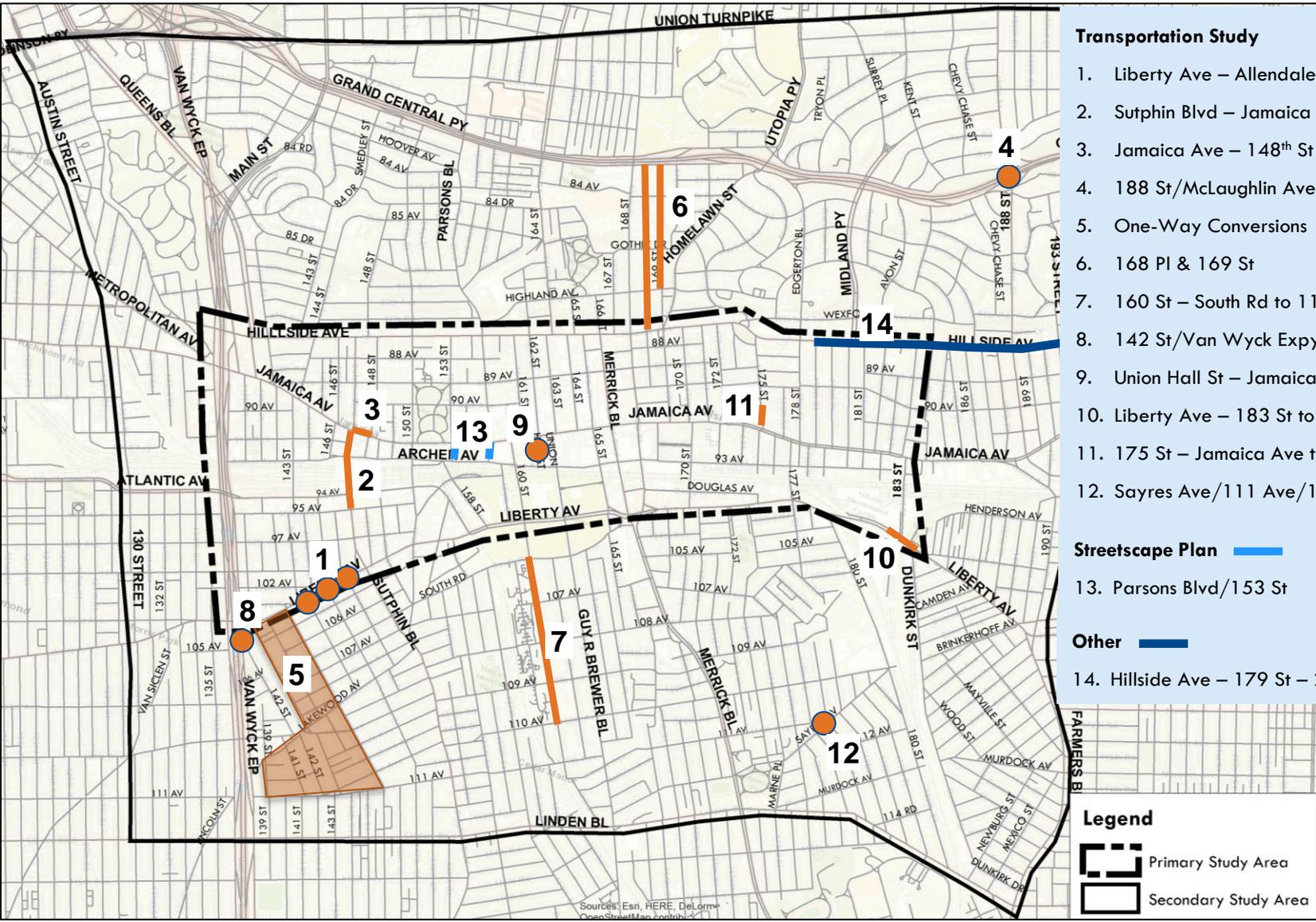
RECOMMENDATIONS



Short-term Improvements

5a

2018 STREET IMPROVEMENT PROJECTS (SIPS)



Transportation Study

1. Liberty Ave – Allendale St to Waltham St
2. Sutphin Blvd – Jamaica Ave to 95 Ave
3. Jamaica Ave – 148th St to Sutphin Blvd
4. 188 St/McLaughlin Ave/G. Central Pkwy SR
5. One-Way Conversions
6. 168 Pl & 169 St
7. 160 St – South Rd to 110 Ave
8. 142 St/Van Wyck Expy SR
9. Union Hall St – Jamaica and Archer Aves
10. Liberty Ave – 183 St to Dunkirk St
11. 175 St – Jamaica Ave to 91 Ave
12. Sayres Ave/111 Ave/177 St

Streetscape Plan

13. Parsons Blvd/153 St

Other

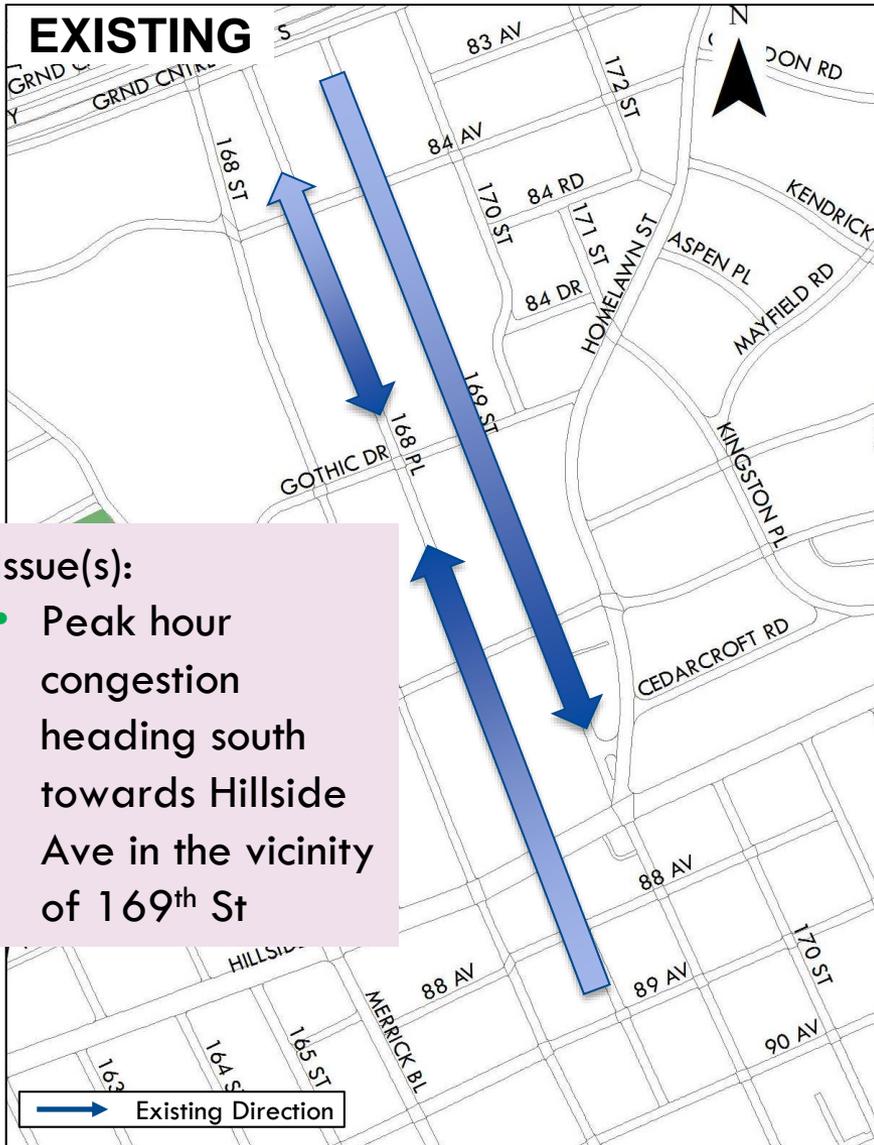
14. Hillside Ave – 179 St – 208 St

Legend

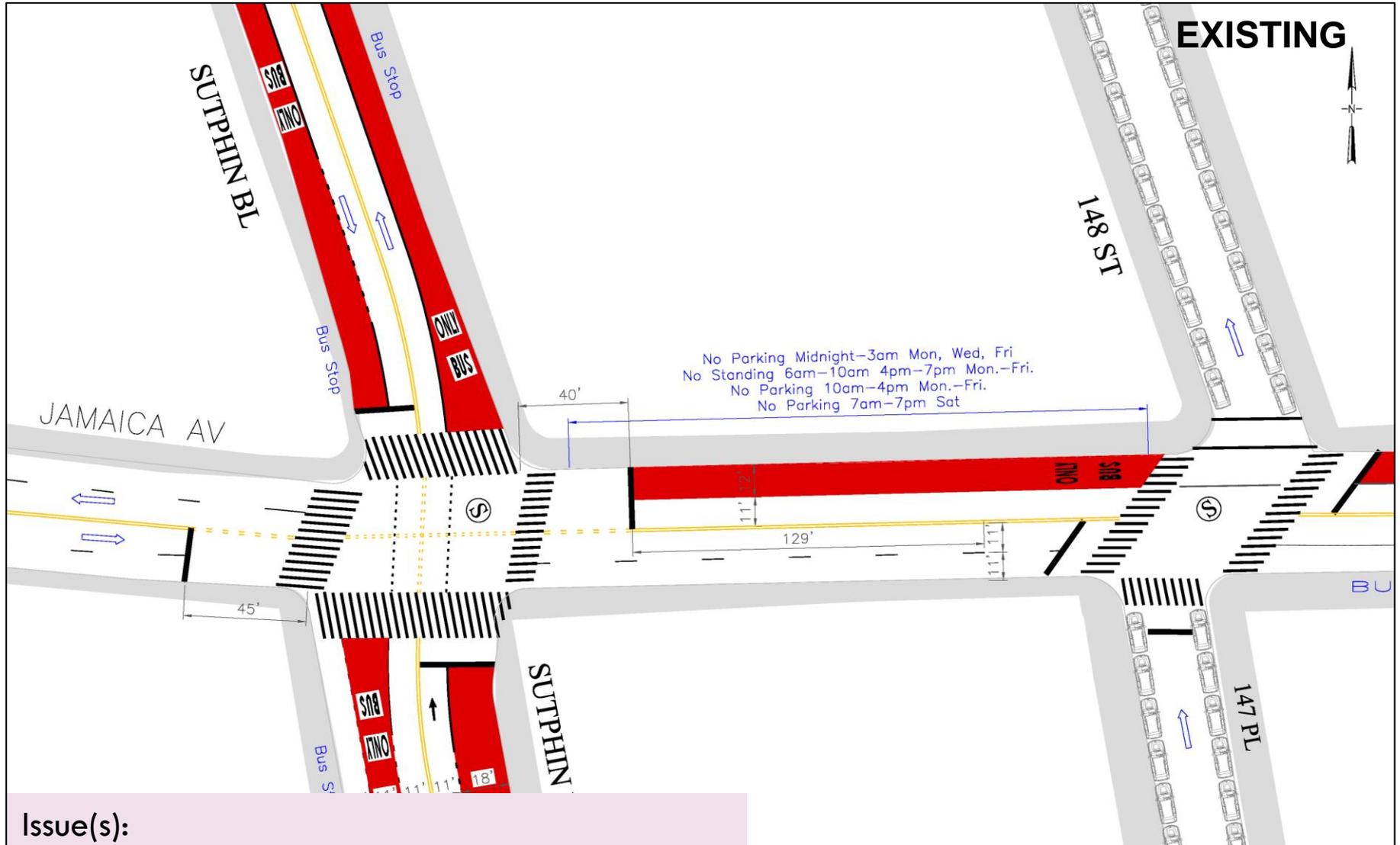
- Primary Study Area
- Secondary Study Area

Source: Esri, HERE, DeLorme, OpenStreetMap, Google

168 PL & 169 ST – GRAND CENTRAL PKWY TO 90 AVE



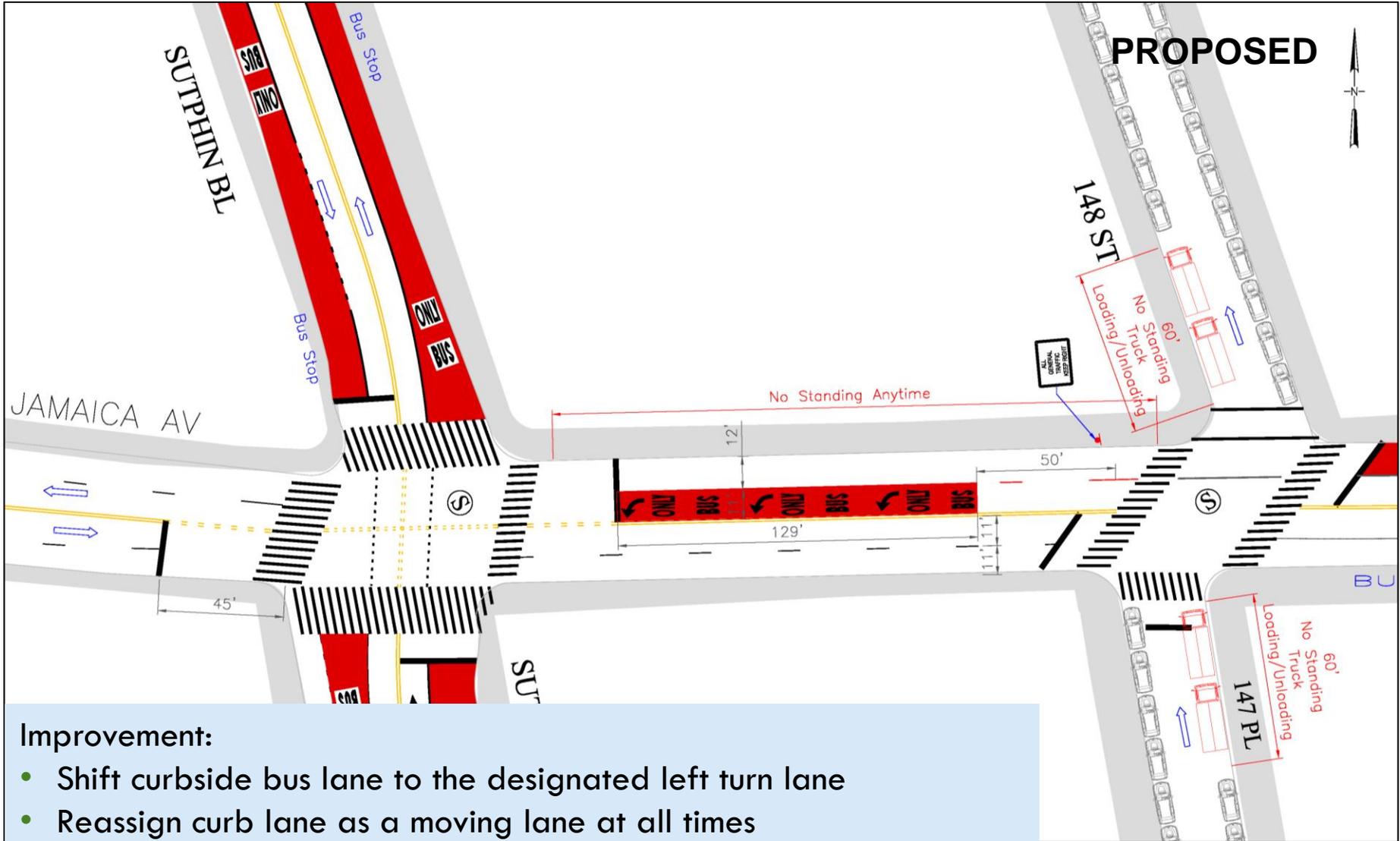
JAMAICA AVE – SUTPHIN BL TO 148 ST



Issue(s):

- Mismatched designated bus lane and usage

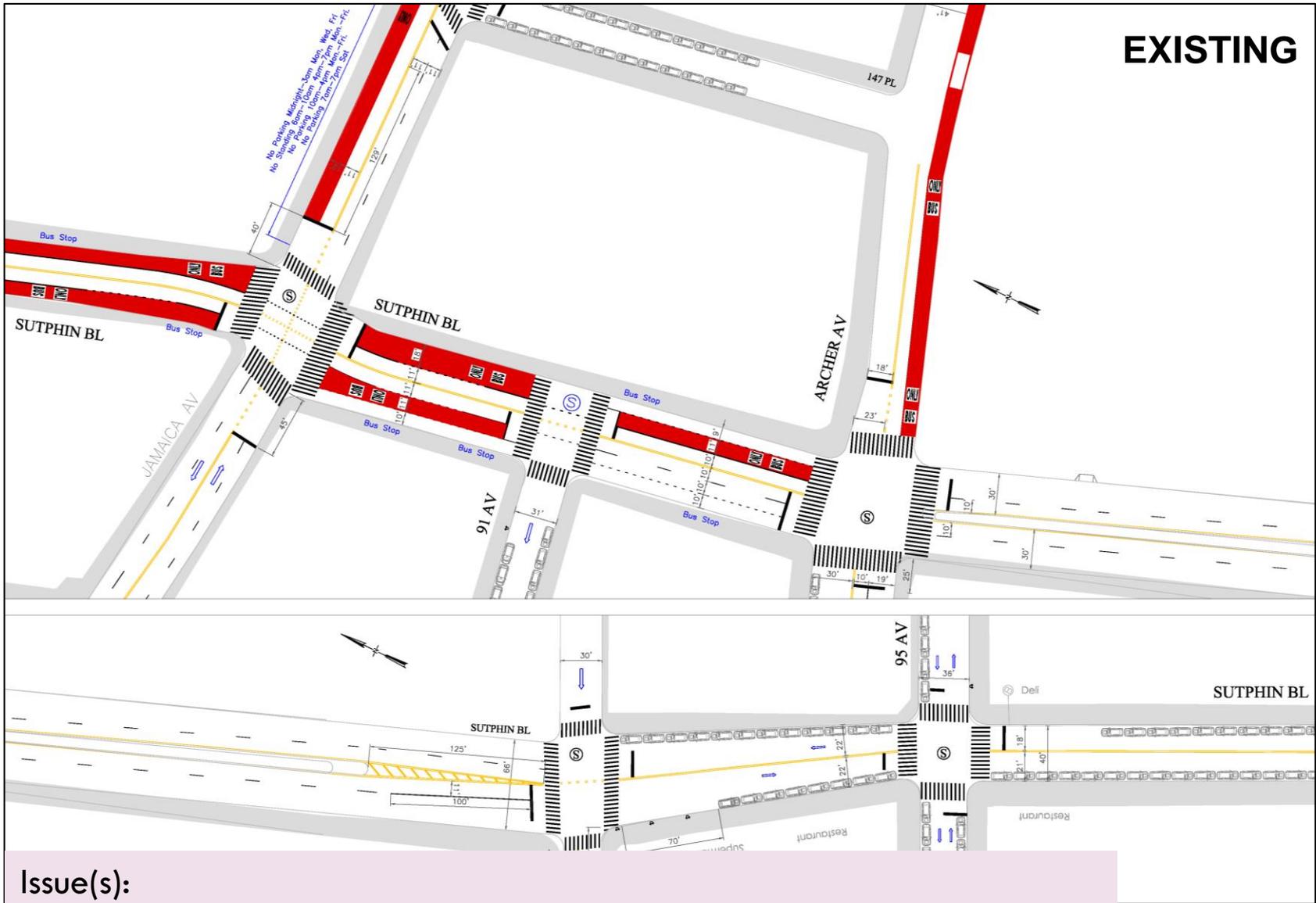
JAMAICA AVE – SUTPHIN BL TO 148 ST



Improvement:

- Shift curbside bus lane to the designated left turn lane
- Reassign curb lane as a moving lane at all times
- Provide truck loading/unloading on 148 St/147 Pl (side streets)

SUTPHIN BL – JAMAICA AVE TO 95 AVE

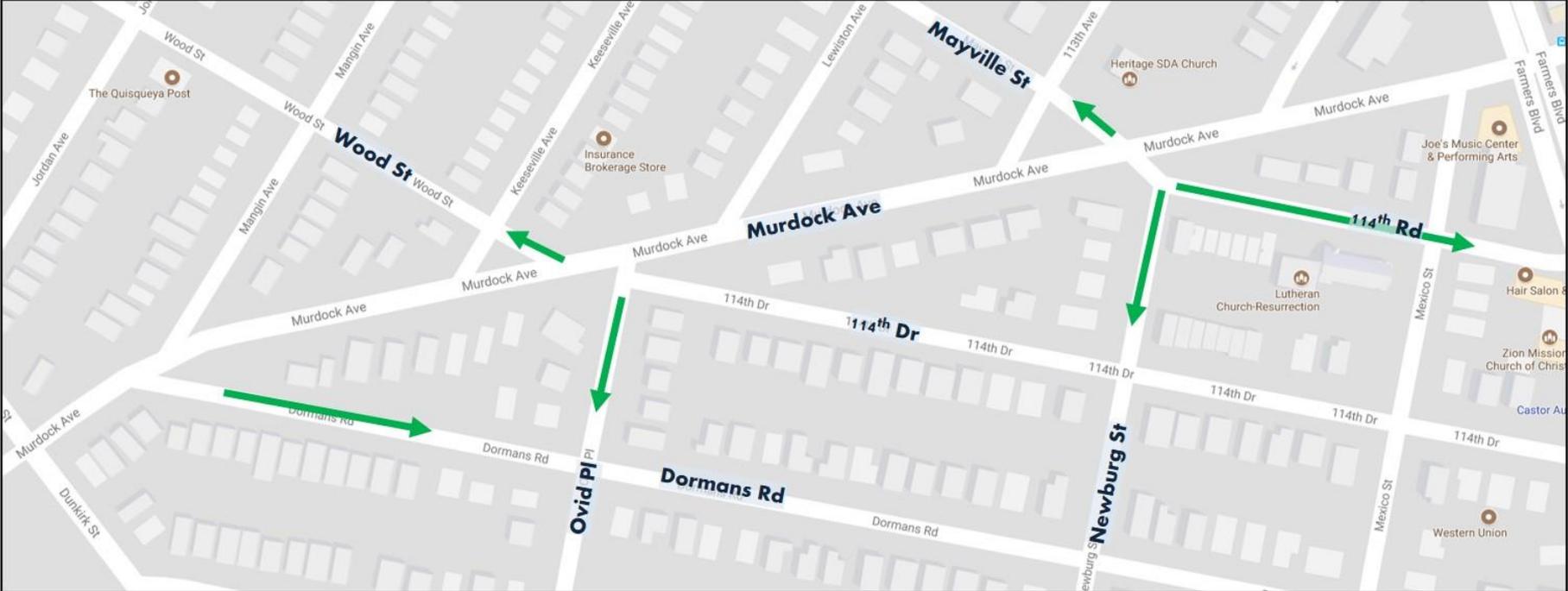


EXISTING

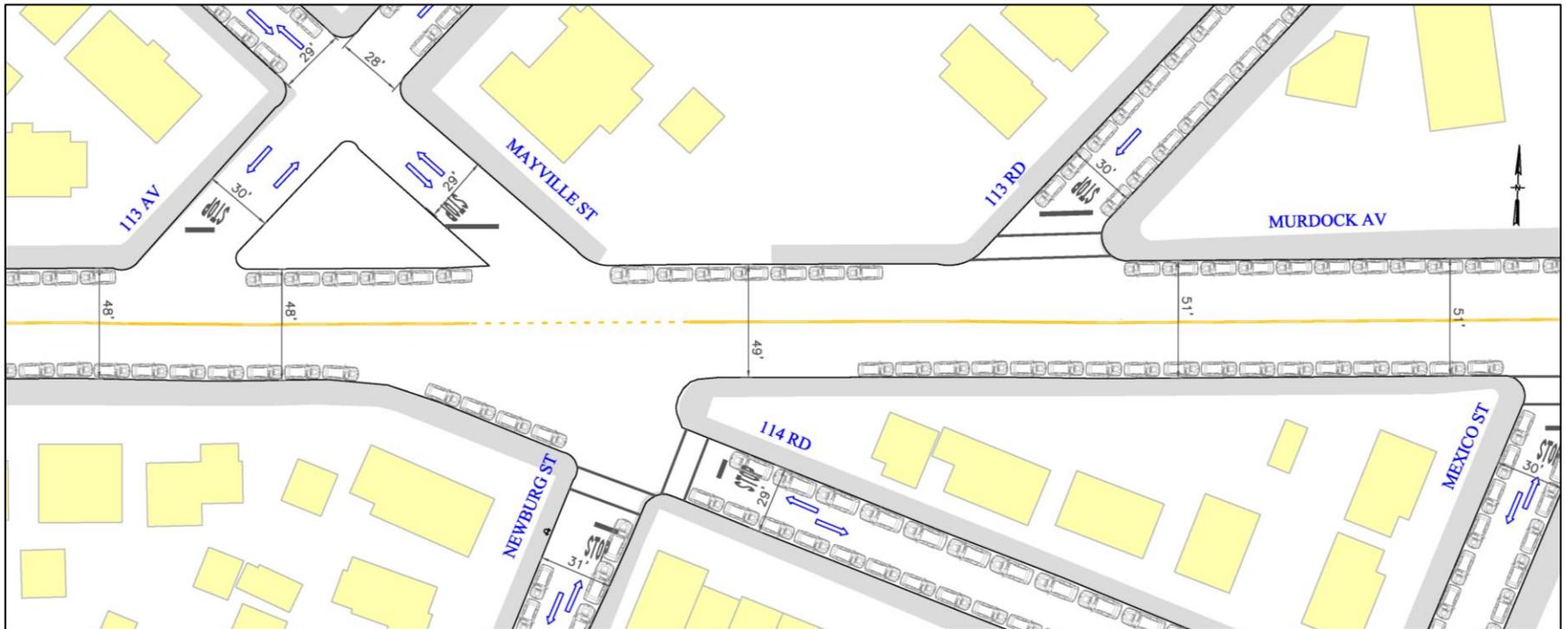
Issue(s):

- Congestion and conflicts along the corridor impedes bus operation

MURDOCK AVE – DUNKIRK ST TO FARMERS BL



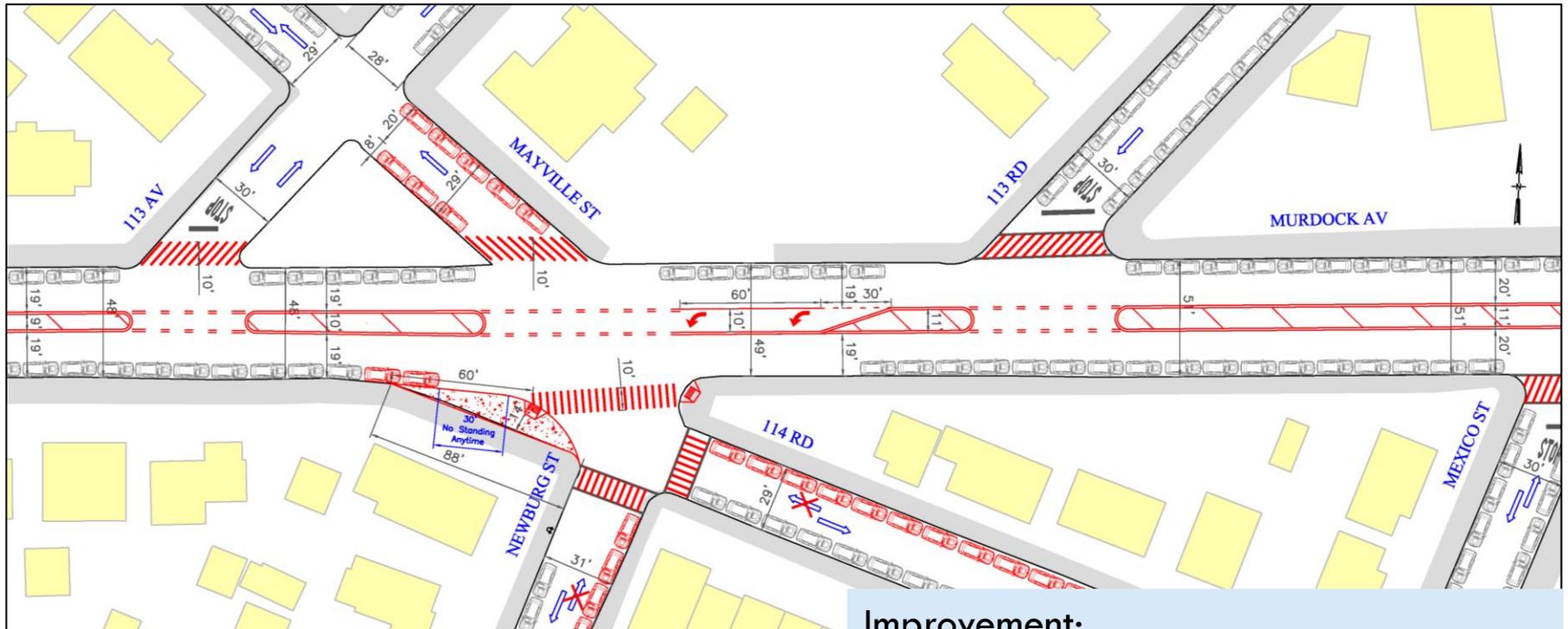
MURDOCK AVE – DUNKIRK ST TO FARMERS BL EXISTING



Issue(s):

- Roadway is wide (46') and generally unmarked
- Complex, unsignalized intersections

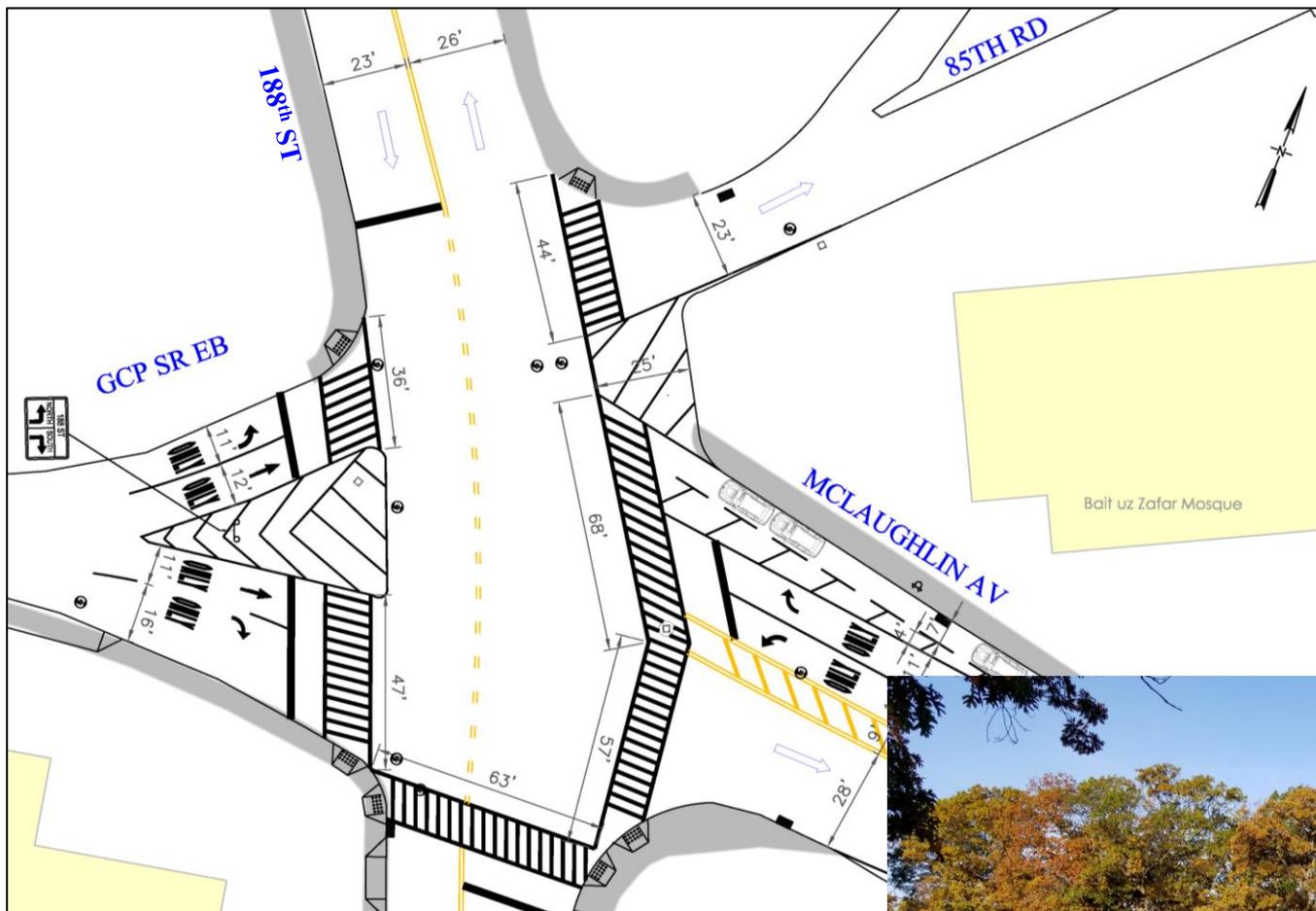
MURDOCK AVE – DUNKIRK ST TO FARMERS BL PROPOSED



Improvement:

- Install hatched median with left turn bays
- Install curb extensions to shorten crossing distance
- Convert street direction to reduce conflicts at complex intersections

188 ST/MCLAUGHLIN AVE/GCP SVC RD



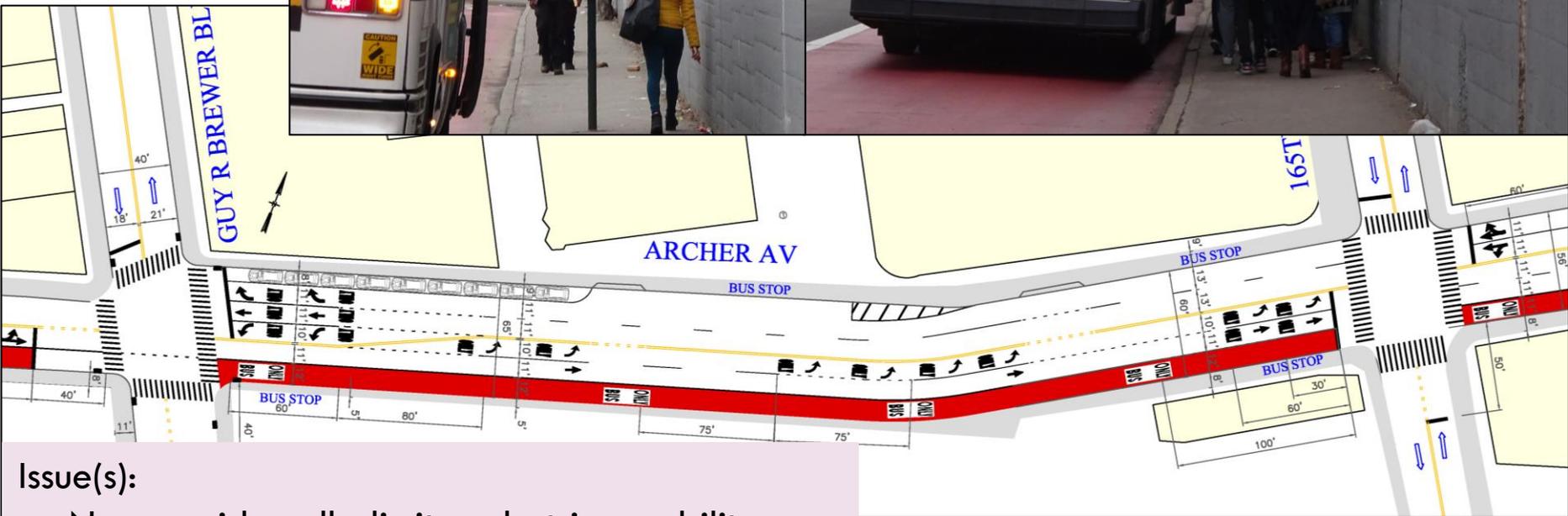
Issue(s):

- Wide intersection with pedestrian refuge islands
- Unmarked crosswalk

**Long-term Improvements
(Concepts)**

5b

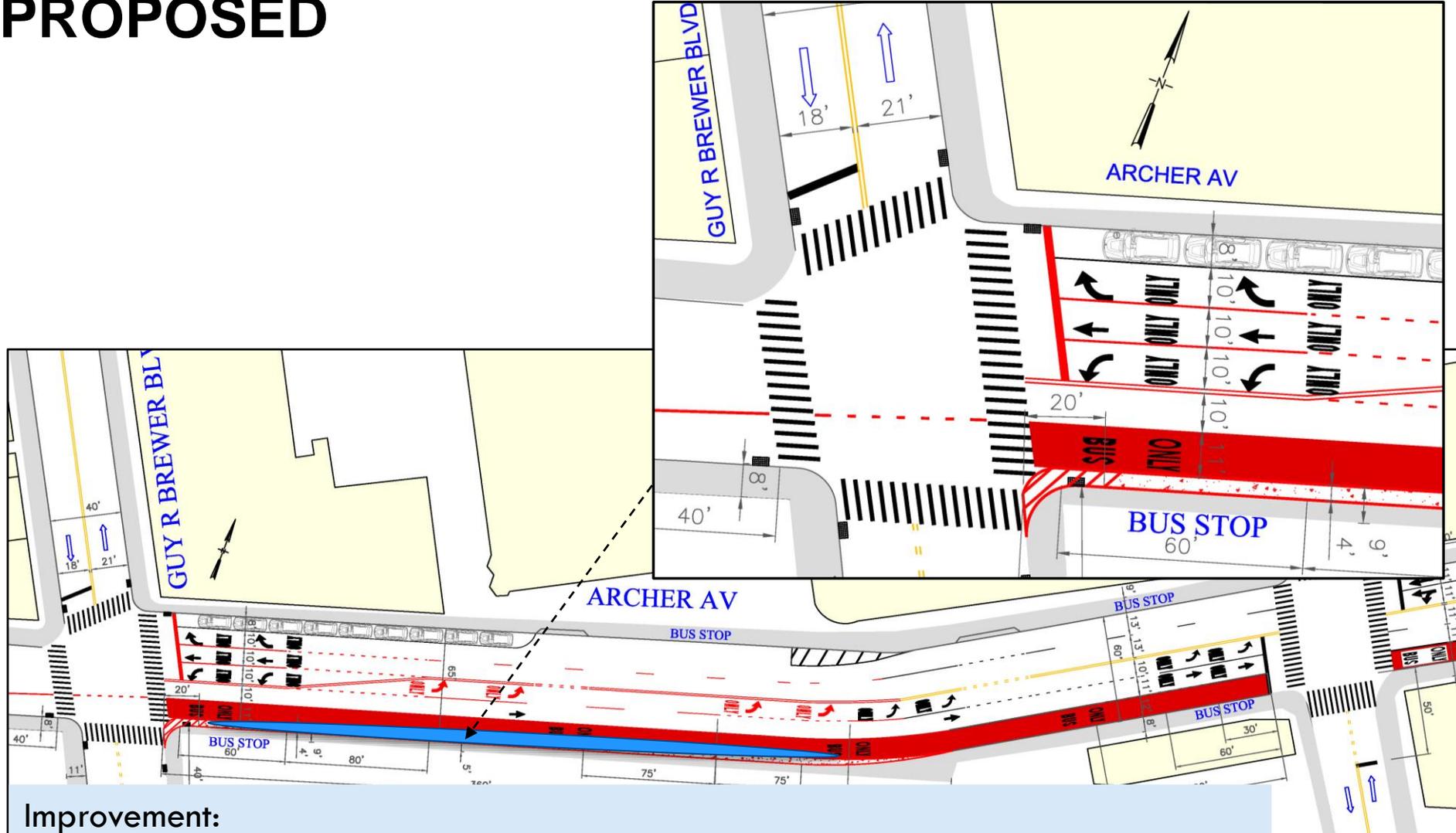
ARCHER AVE – GUY R BREWER TO 165 ST EXISTING



Issue(s):

- Narrow sidewalks limit pedestrian mobility

ARCHER AVE – GUY R BREWER TO 165 ST PROPOSED



Improvement:

- Widen sidewalk between Guy R. Brewer Blvd & 165 St by 4 feet to 9 feet
- Identified for capital project

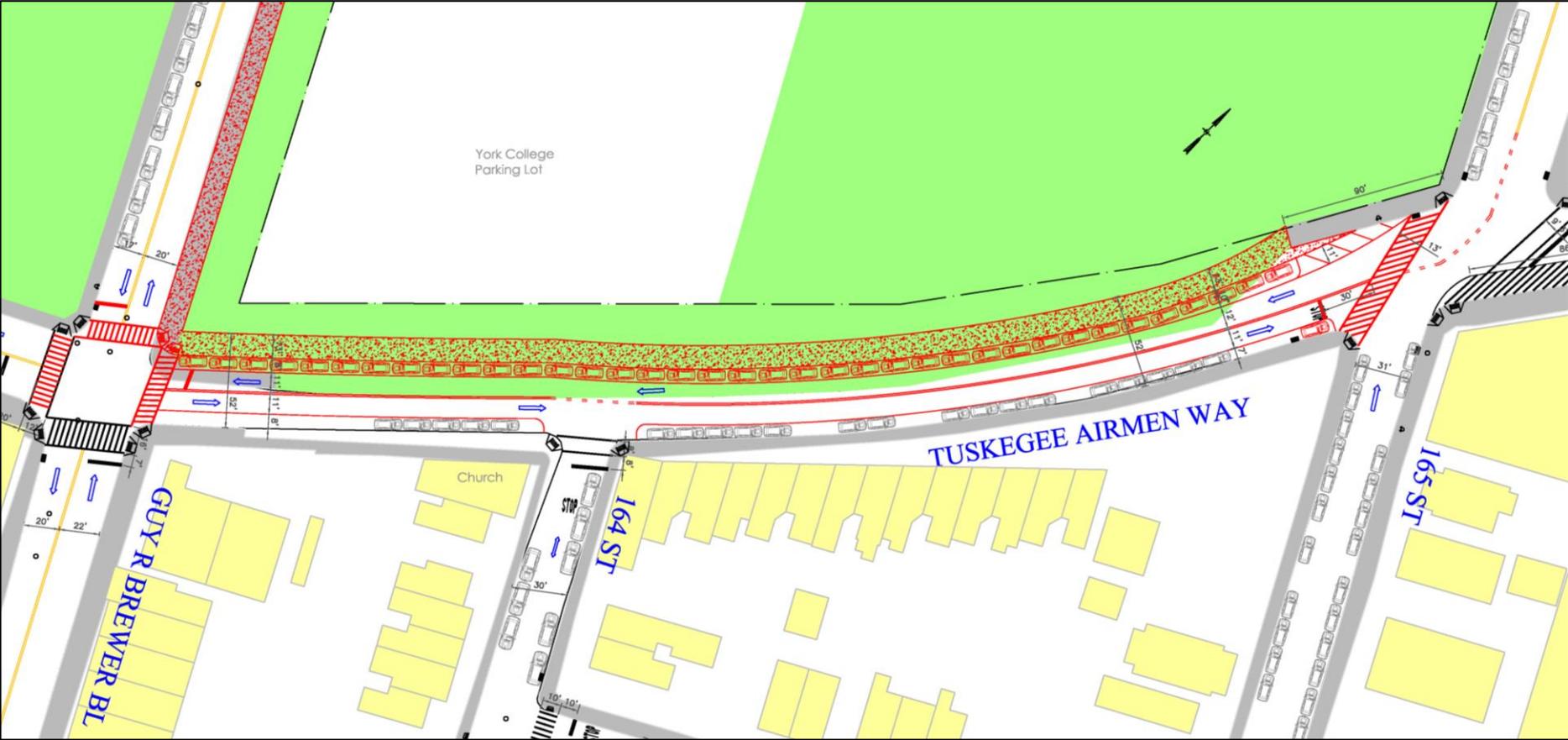
SOUTH ROAD – GUY R BREWER BLVD TO 165 ST ROADWAY RECONSTRUCTION



Issue(s):

- Narrow under developed roadway without sidewalk

SOUTH ROAD - GUY R BREWER BLVD TO 165 ST ROADWAY RECONSTRUCTION

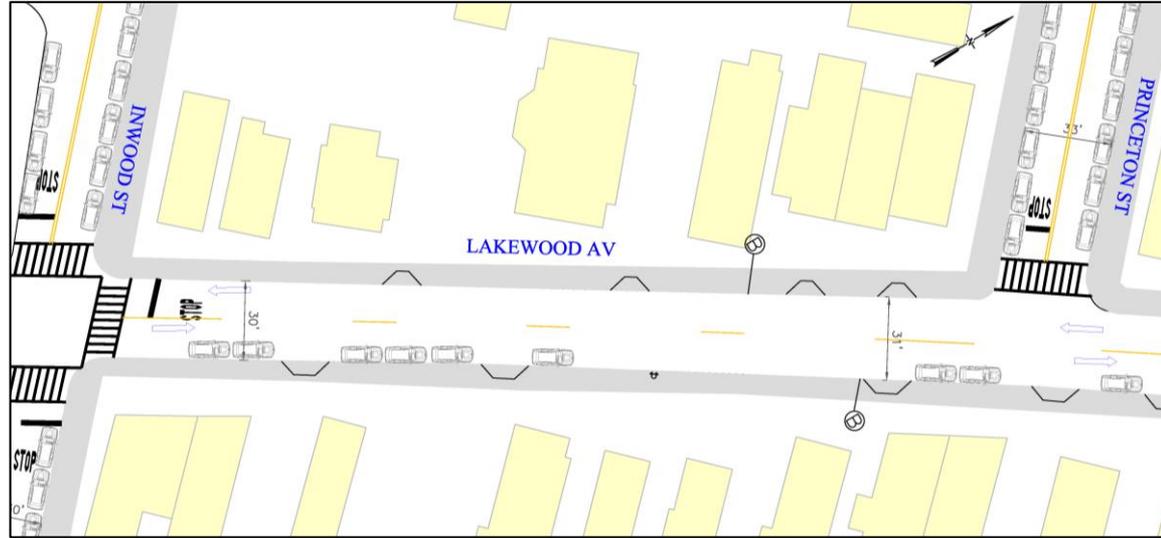
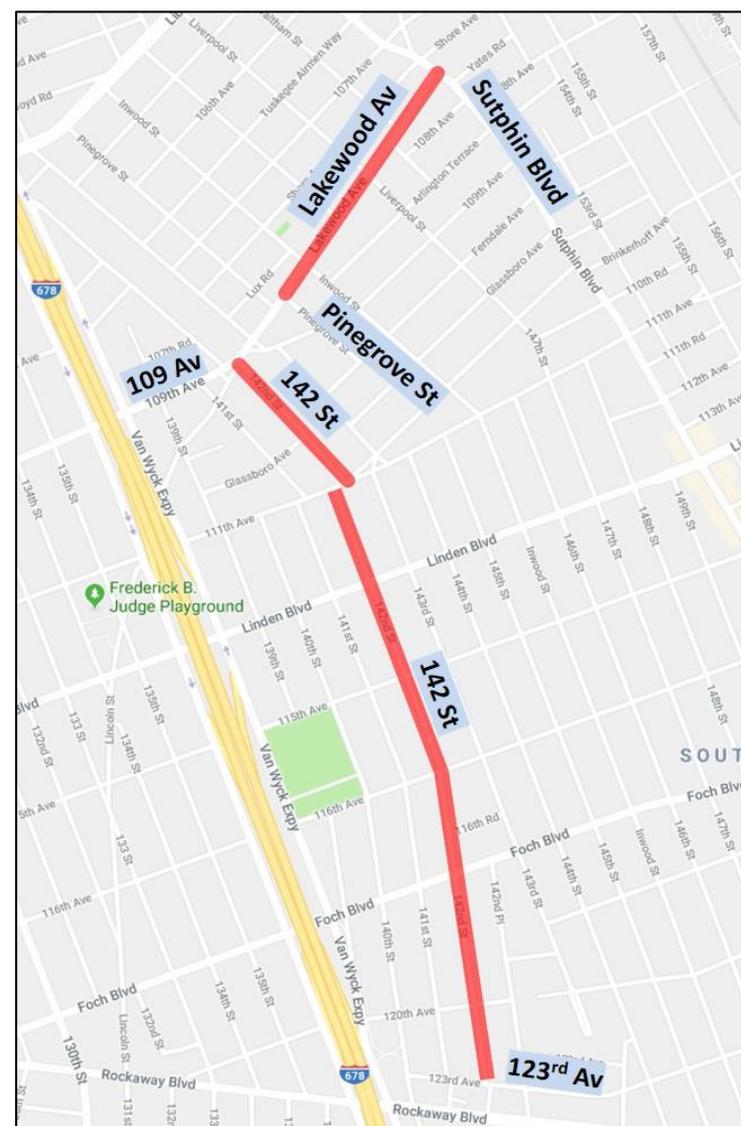


Improvement:

- Reconstruct roadway to appropriate width with sidewalk on north curb
- Identified for capital project

Q40 BUS ROUTE IMPROVEMENT CONCEPT

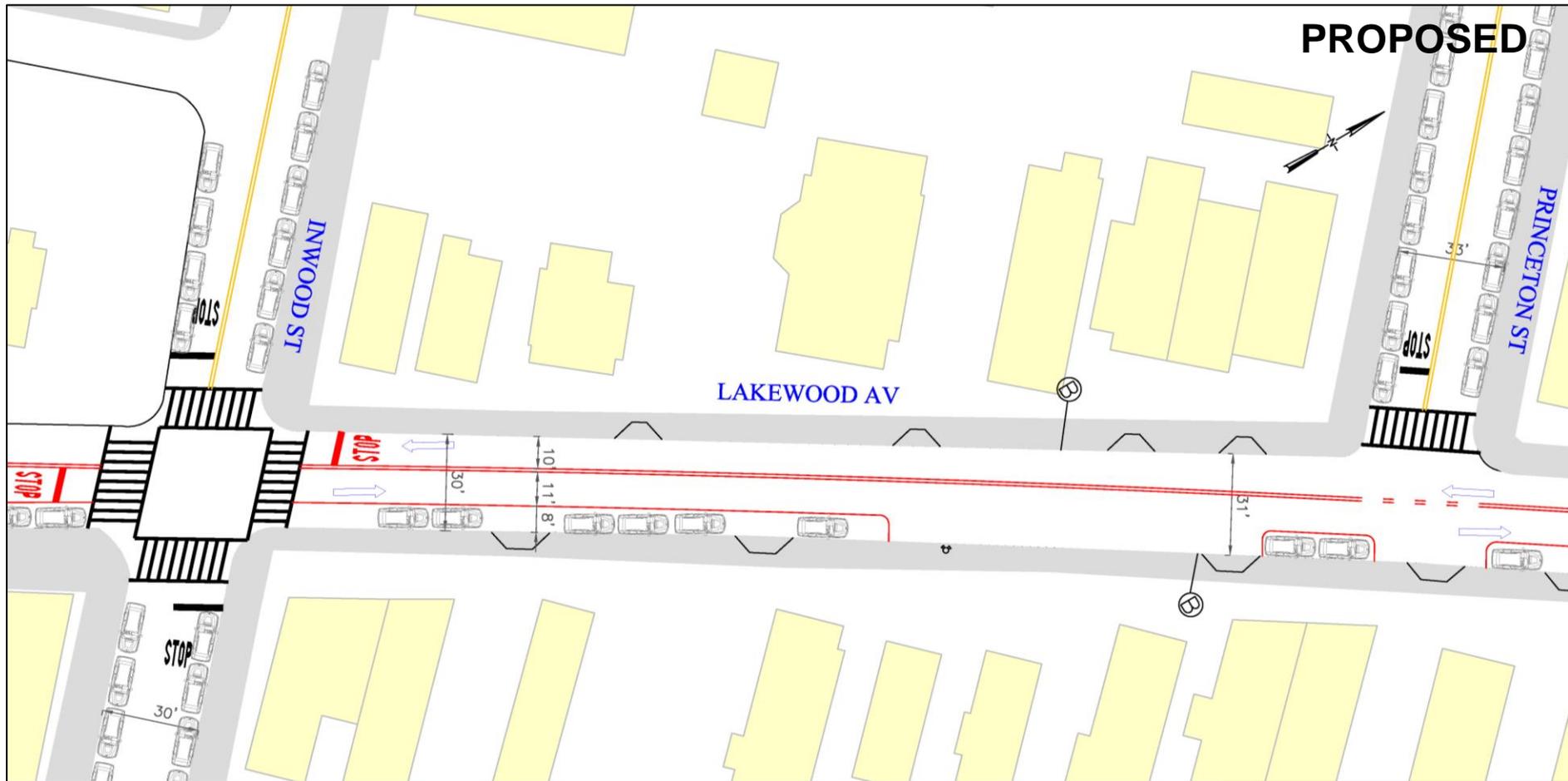
LAKWOOD AVE & 142 ST - EXISTING



Issue(s):

- Narrow roadway with two-way bus routes
- Lakewood Ave and 142 St are bus routes (Q40)
- Roadway width is generally less than 30'
- Parking on both sides

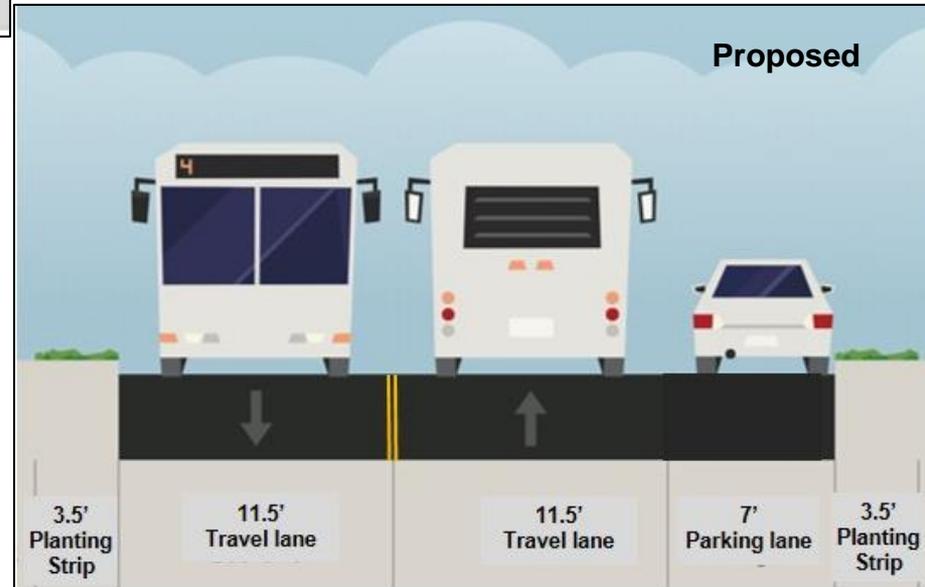
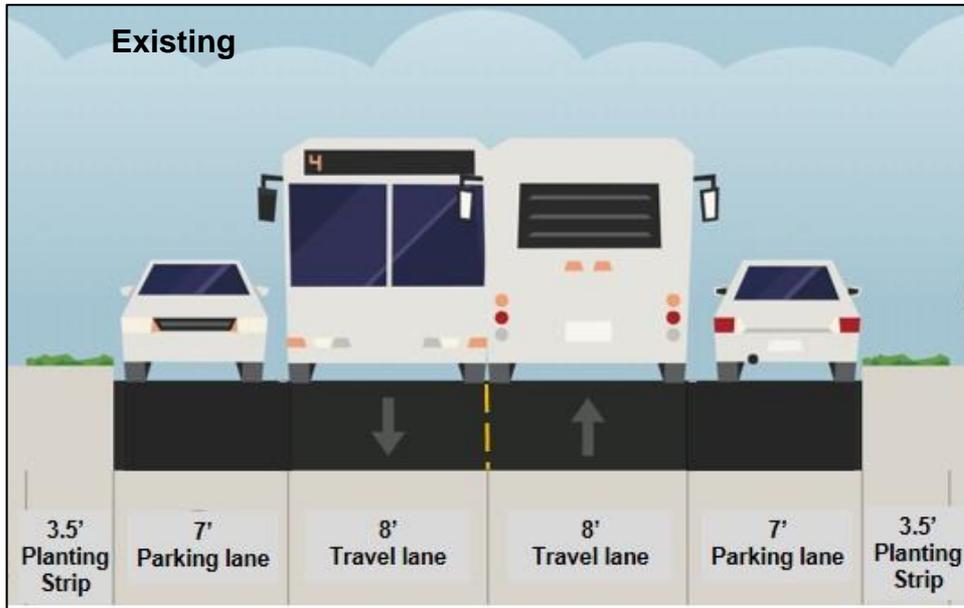
Q40 BUS ROUTE IMPROVEMENT (CONT'D)



Improvement:

- Limit parking on the north/west curb to facilitate traffic operations

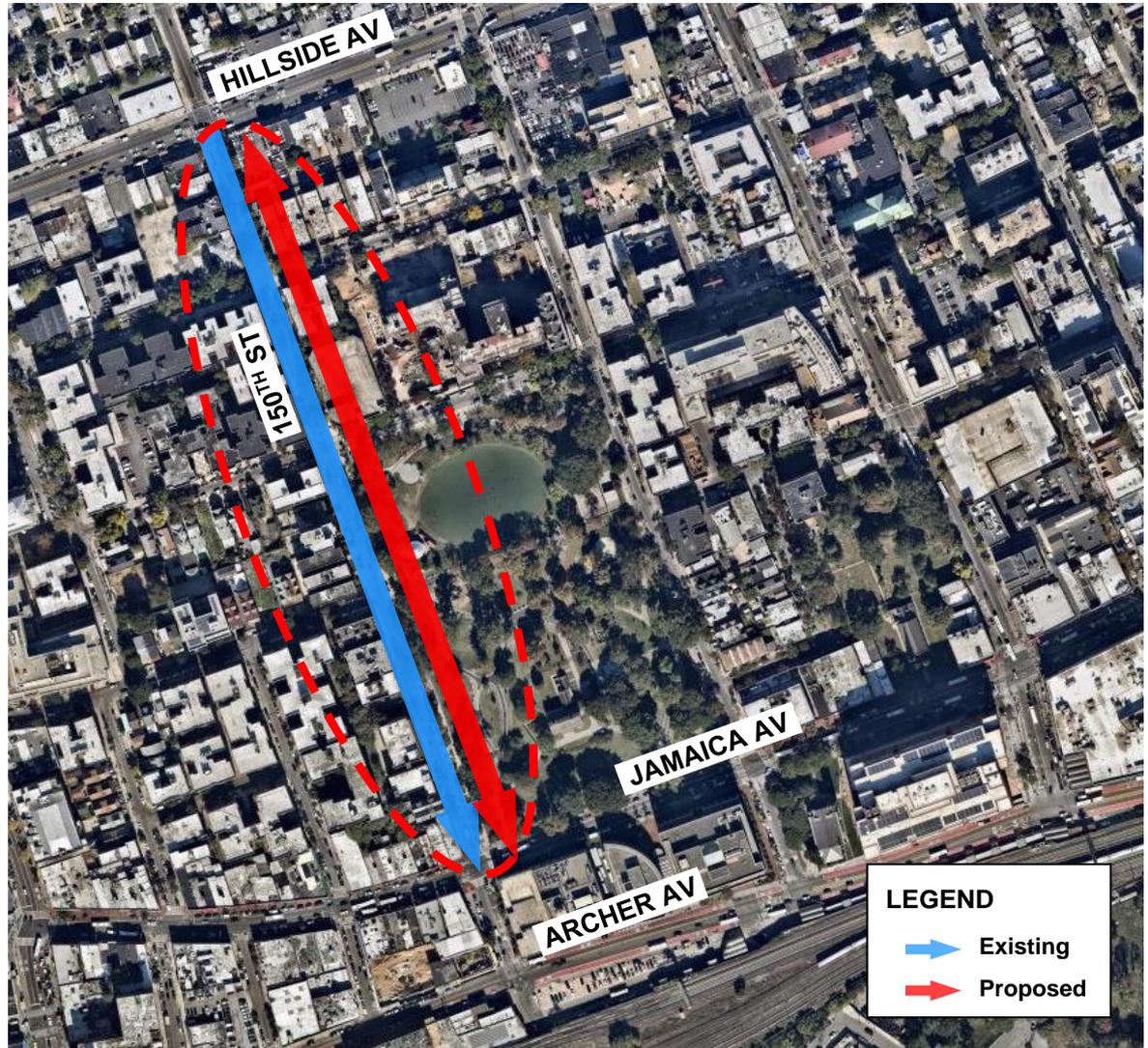
LAKEWOOD AVE @ INWOOD ST



150 STREET – TWO-WAY CONCEPT HILLSIDE TO JAMAICA AVE

Issue(s):

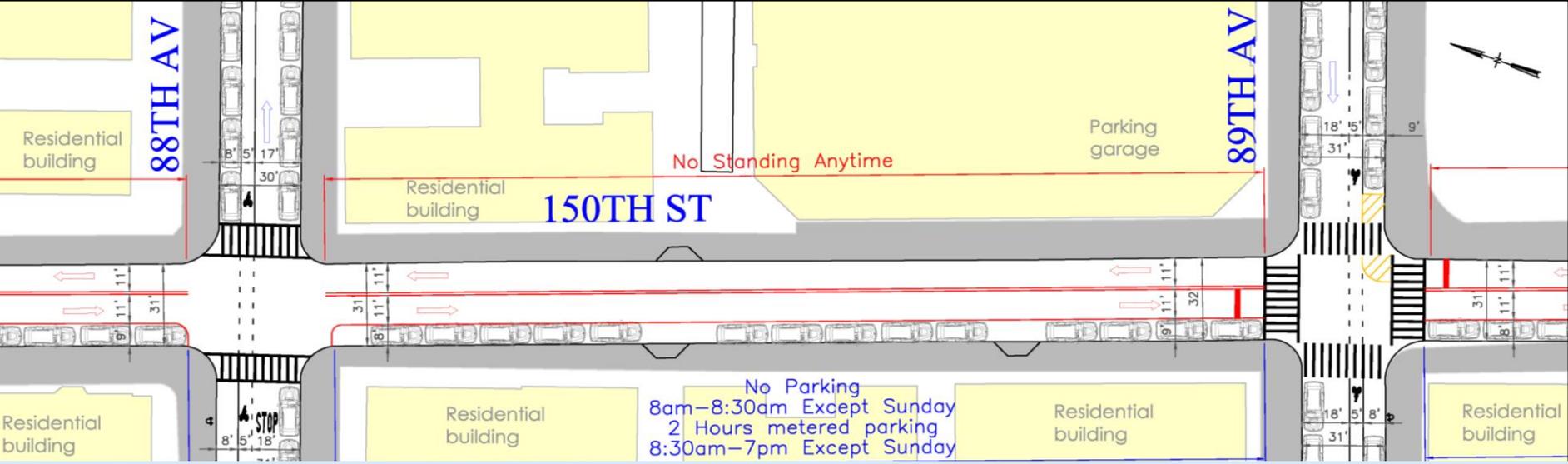
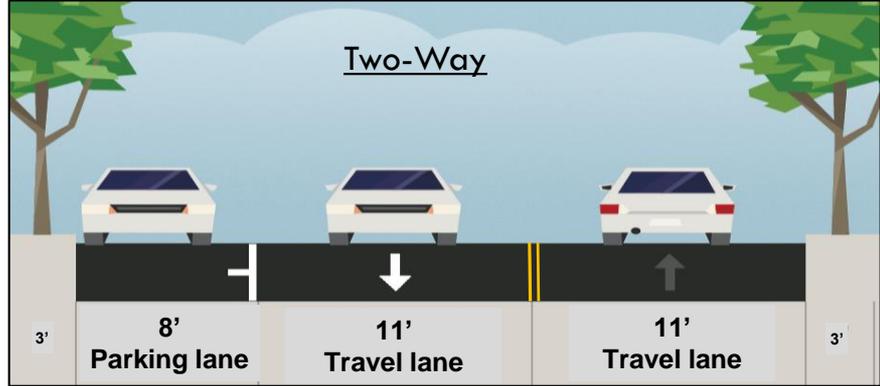
- Limited north-south through streets



LEGEND

- ➡ Existing
- ➡ Proposed

150 STREET – TWO-WAY CONCEPT (CONT'D)

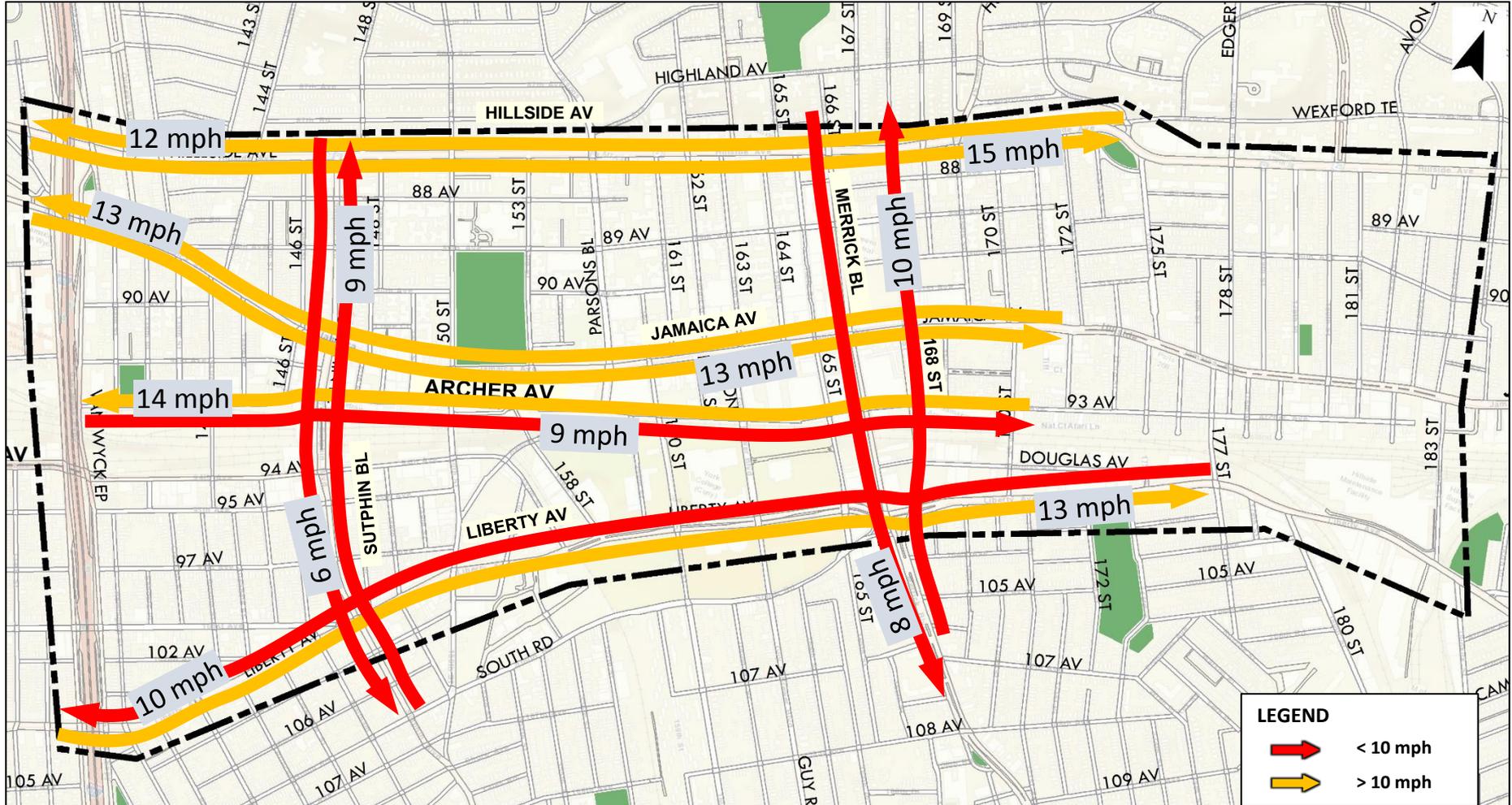


Improvement:

- Remove parking and convert 150th St to two-way operation from Hillside Ave to Jamaica Ave to correspond with use north of Hillside Ave and south of Jamaica Ave

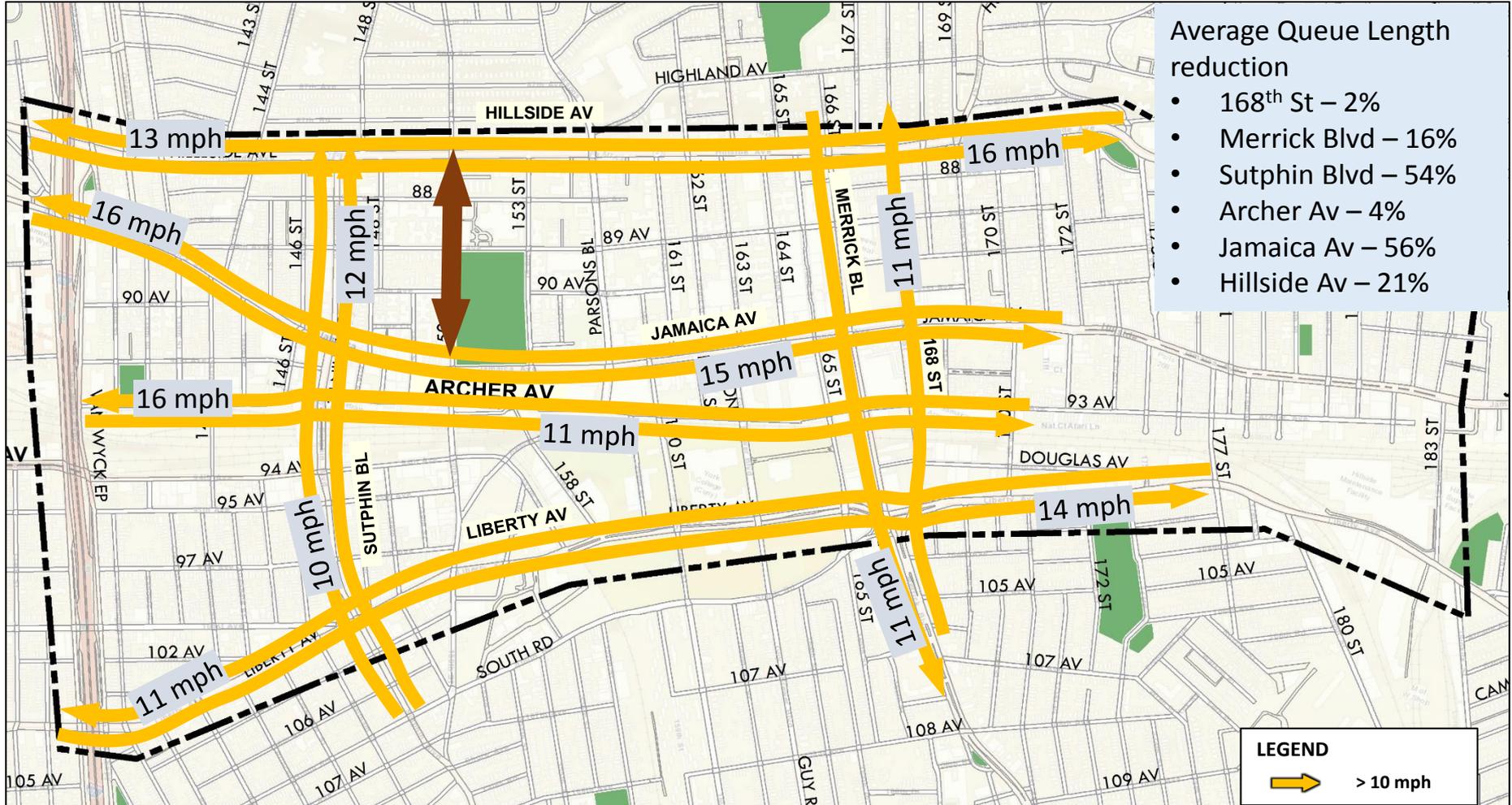
CORRIDOR AVERAGE TRAVEL SPEED

Existing Conditions PM Peak



CORRIDOR AVERAGE TRAVEL SPEED

Existing with 150th Street Conversion PM Peak



LESSONS LEARNED

- Downtown Jamaica is complex with competing uses/needs
- Parking/curb space is at a premium – needs stronger curb management
- High concentration of pedestrians - destination and through transfer traffic
- Need to balance the needs of pedestrians, safety, traffic, and commuter needs

NEXT STEPS

- Community Board SIP Presentations – April 2018
- Final Report – June 2018
- Project Feasibility Checks/Implementation

THANK YOU!

Questions?



NYC DOT



NYC DOT



nyc_dot



NYC DOT