

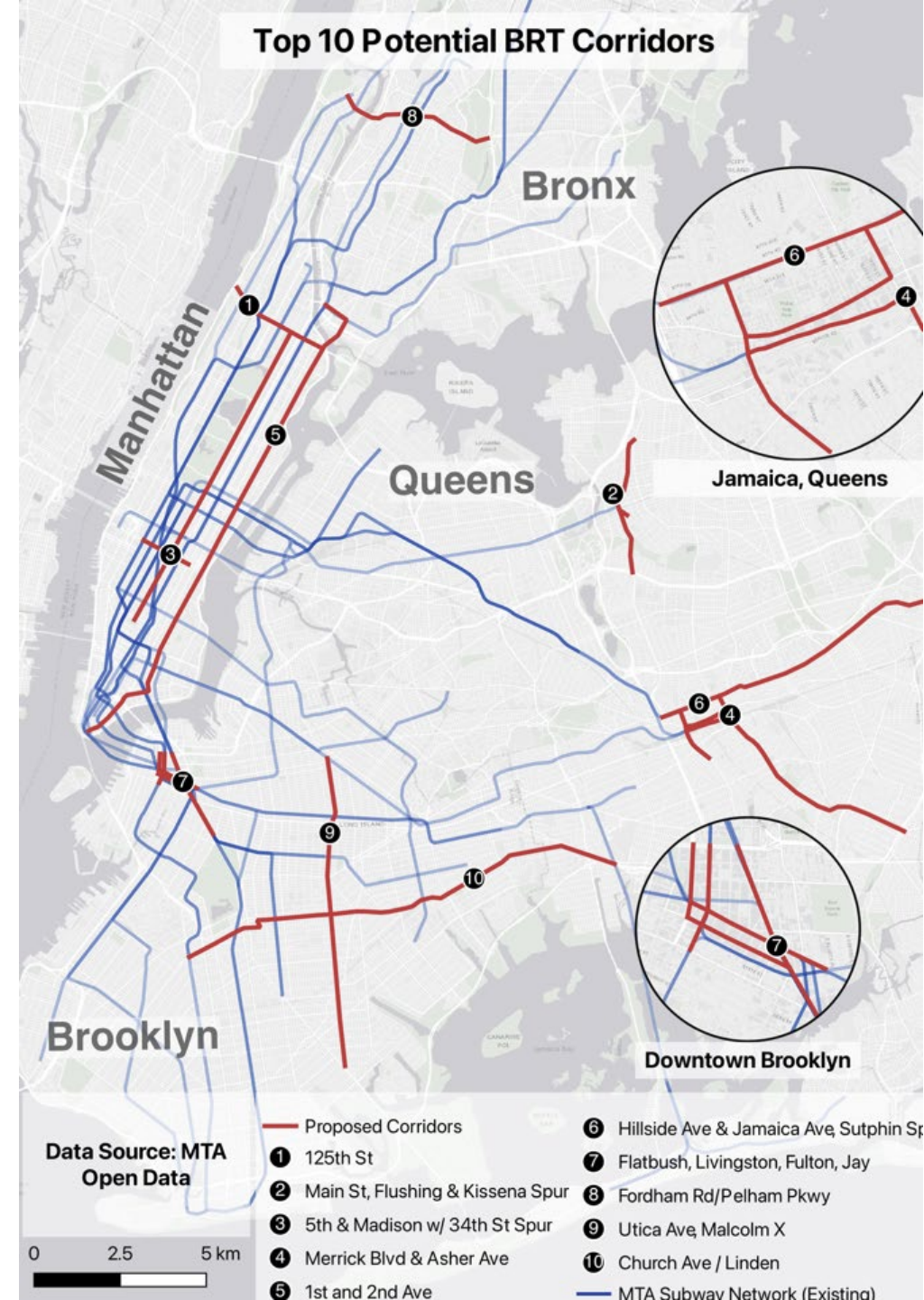
Where Should NYC Build BRT?

A Transparent Technical Review

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People-Oriented Cities

July 2025



The NYC Streets Plan stated:

“The City could work with the MTA to plan—and fund—the next generation of major transit investments, including subway, rail, and bus rapid transit (BRT).”

Decisionmakers often express a willingness to develop a “True BRT” in New York City, but the question is “Where?”

Why this report?

- Before we can answer 'where', we have to clarify 'what'.
 - What is the difference between SBS, Bus Priority Corridors, and BRT?
- Then, how well have NYC DOT & MTA been prioritizing their SBS and Bus Priority Corridors? Do they make sense for BRT?
- If NYC builds a full BRT, where should it go?

BRT: Is it a route or a corridor?

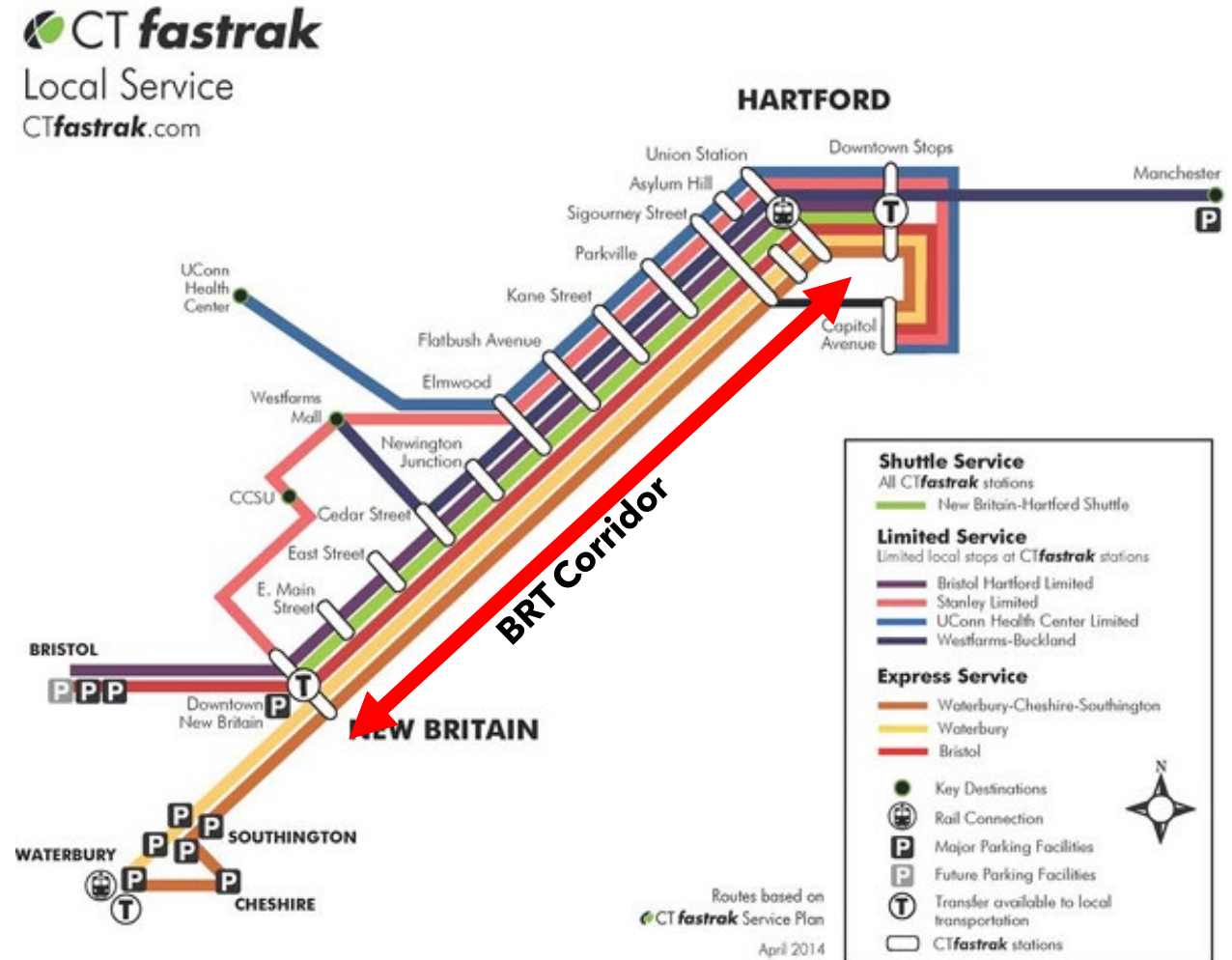
In many US cities, BRT is thought of as a route type. All priority measures are applied specifically to one bus route.



BRT: Is it a route or a corridor?

BRT at its best refers to a corridor with specific bus priority measures.*

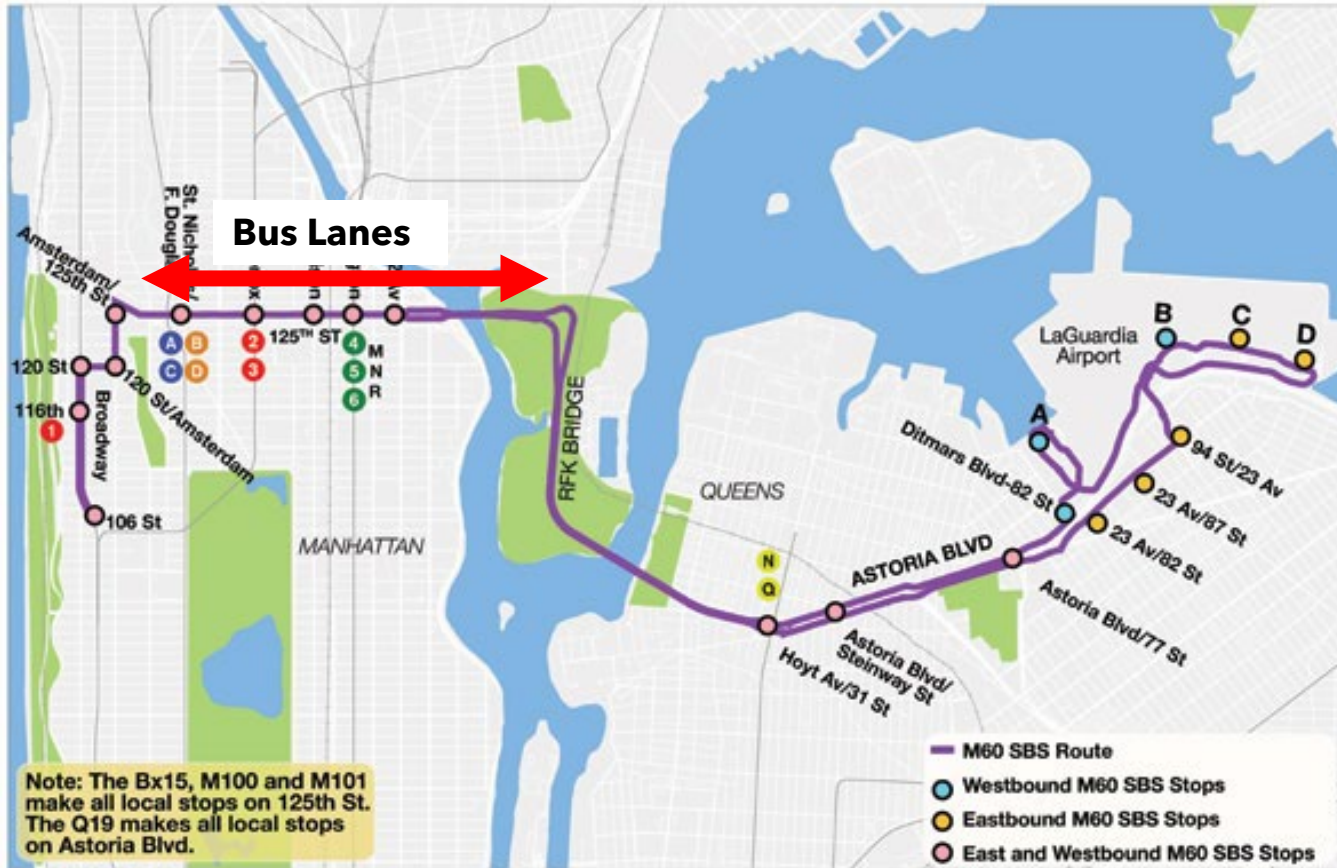
A BRT corridor may include - and benefit - many different routes.



Example: Ctfastrak, Hartford, CT

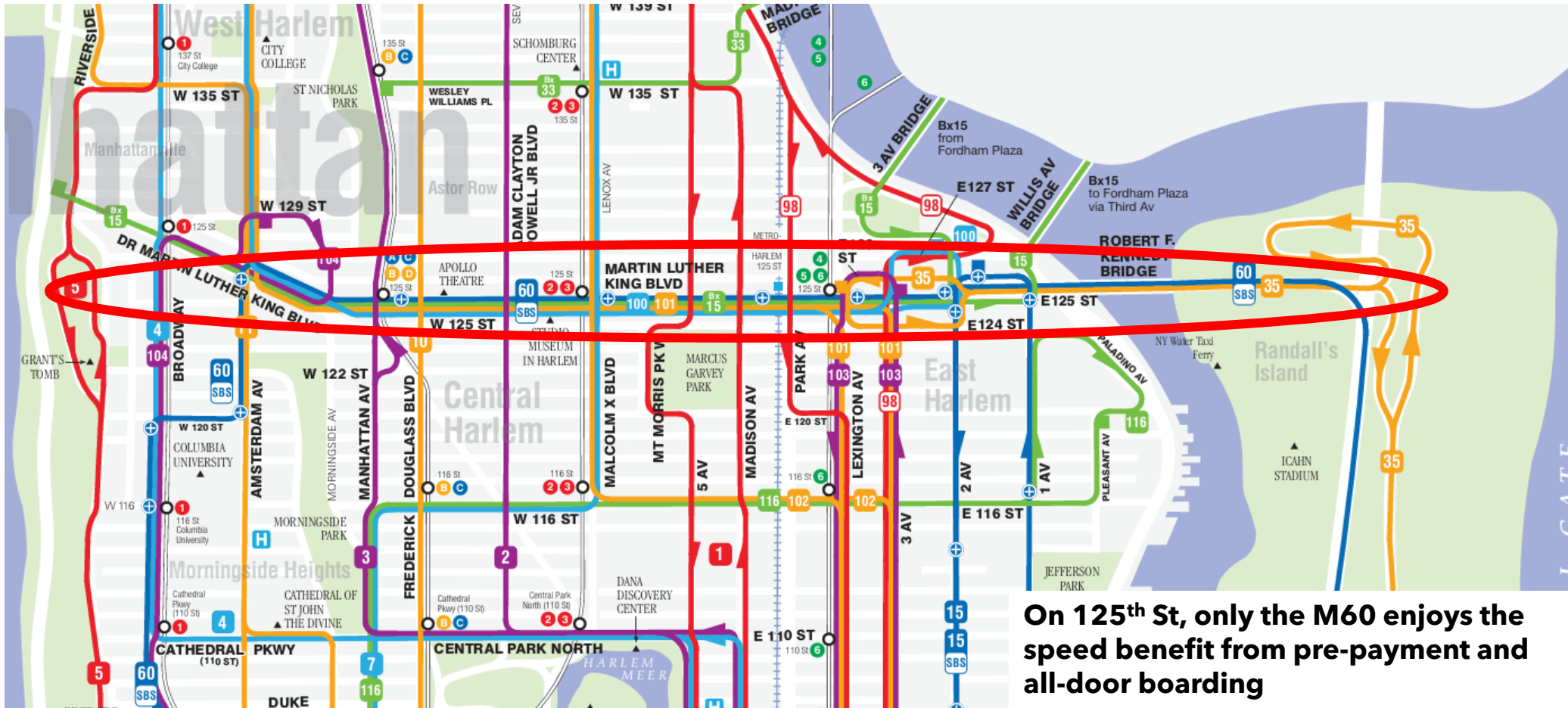
*at least 2 miles

Is SBS BRT?



SBS was a **route designation**. The bus route made fewer stops, had pre-paid all-door boarding. There were also dedicated lanes, but only on part of the route, and many BRT features were missing.

Is SBS a route or a corridor?



All-door boarding was done through proof-of-payment rather than all-door boarding stations. Other bus routes on the corridor did not have all-door boarding, though they also used the bus lanes. There were not enough BRT measures on the corridor to designate it as a “BRT corridor”.

Effectiveness of SBS

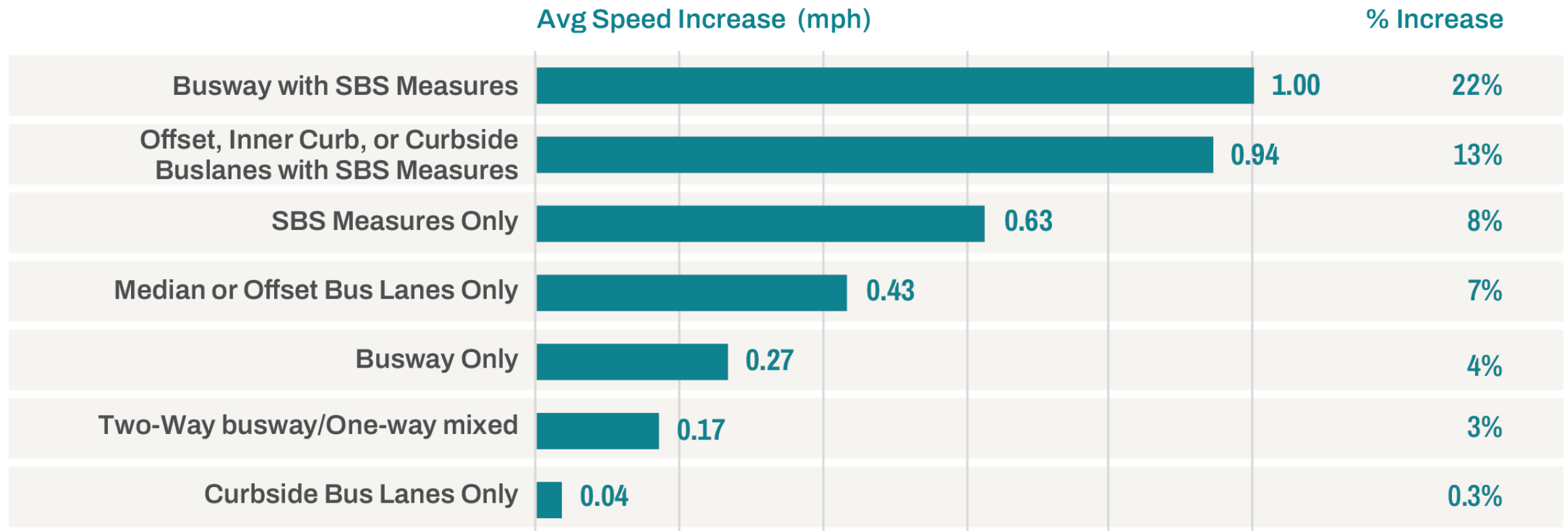
While a BRT corridor need not run the full length of any given route, it should be located on the part of the route where the highest volume of bus passengers are facing significant delays.

In SBS, often significant areas of delay were missed. Priority measures brought some time savings but could have gone farther.

This became NYC's BRT-Lite brand.



Effectiveness of SBS



The speed improvements on SBS routes therefore did not measure up to the likely speed gains from full BRT on the corridor.

BRT Network Planning in NYC Historically

SBS as a Network of Bus Routes

The initial selection of SBS routes was based on:

- Highest demand bus routes
- Road width
- One in each borough
- Minimal subway overlap

Demand has changed somewhat since the SBS corridors were originally identified, with huge drops in bus ridership on many lines.

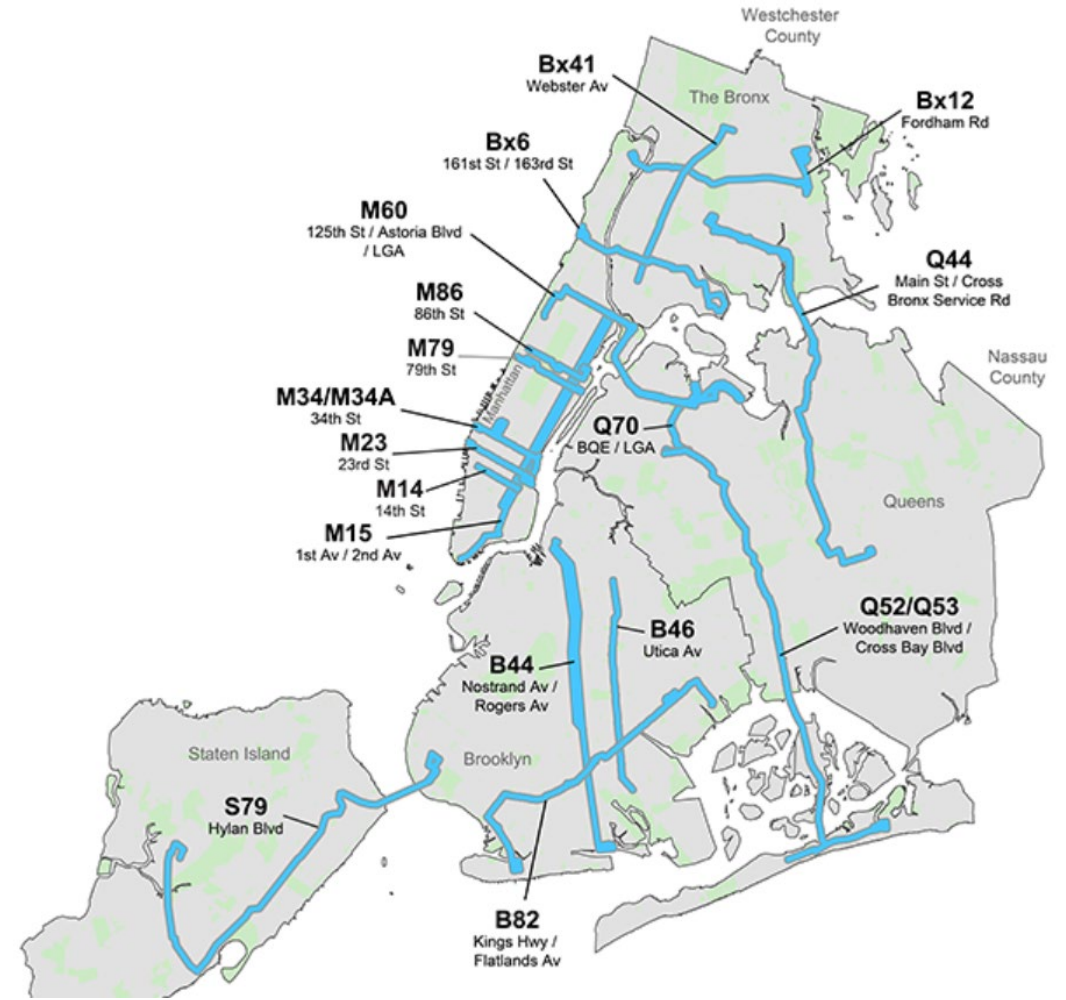
- 9 of the top demand bus routes today are SBS routes
- 2 are planned SBS or XT routes (Flatbush & Church Ave)
- 1 was a planned SBS route but not implemented (Northern Blvd)
- 1 is on the same road as a different SBS route (M101/M60)
- 1 overlaps the subway substantially (Grand Concourse)
- The rest are on narrow roads.

Rank	Route	2023 Ridership	Primary Streets	SBS Route (Y/N)
1	M15 Lcl/SBS	32,298	1st & 2nd Ave	✓
2	Q58	21,774	Grand Ave, College Point Ave/Sanford Ave, 108th St	✗
3	B6	19,045	Bay Parkway	✗
4	Bx12 Lcl/SBS	18,388	Fordham Rd	✓
5	B82 Lcl/SBS	18,080	Kings Highway, Flatlands	✓
6	Q27	17,180	Kissena Blvd	✗
7	B44 Lcl/SBS	17,121	Bedford/Rogers/Nostrand	✓
8	B46 Lcl/SBS	17,091	Utica, Malcolm X	✓
9	Q65	16,031	162nd, Sanford Ave, College Blvd	✗
10	Q25	15,017	Kissena Blvd, Archer Ave, Jamaica Ave	✗
11	B41	14,595	Flatbush	✗
12	Q10	14,434	Lefferts	✗
13	Q44-SBS	14,247	Main St Flushing, Sutphin Ave, Hillside Ave	✓
14	B35	14,171	Church Ave	✗
15	Q46	13,841	Union Turnpike	✗
16	M14 Lcl/SBS	13,626	14th St	✓
17	M101	13,509	Amsterdam Ave/125th St	✗
18	Bx1/2	13,117	Grand Concourse	✗
19	M86-SBS	13,016	86th St Manhattan	✓
20	Q23	12,569	108th St	✗
21	Q52/53 Lcl/SB	12,458	Woodhaven	✓
22	B1	11,628	86th St Brooklyn	✗
23	B8	11,549	18th Ave/Ave. D	✗
24	Q66	11,430	Northern Blvd	✗
25	Q17	11,219	Kissena Blvd, Horace Harding, 188th, Hillside	✗

SBS as a Network of Routes

Originally, 23 SBS **routes** were identified. By the time the MTA stopped adding SBS routes, 17 had been implemented.

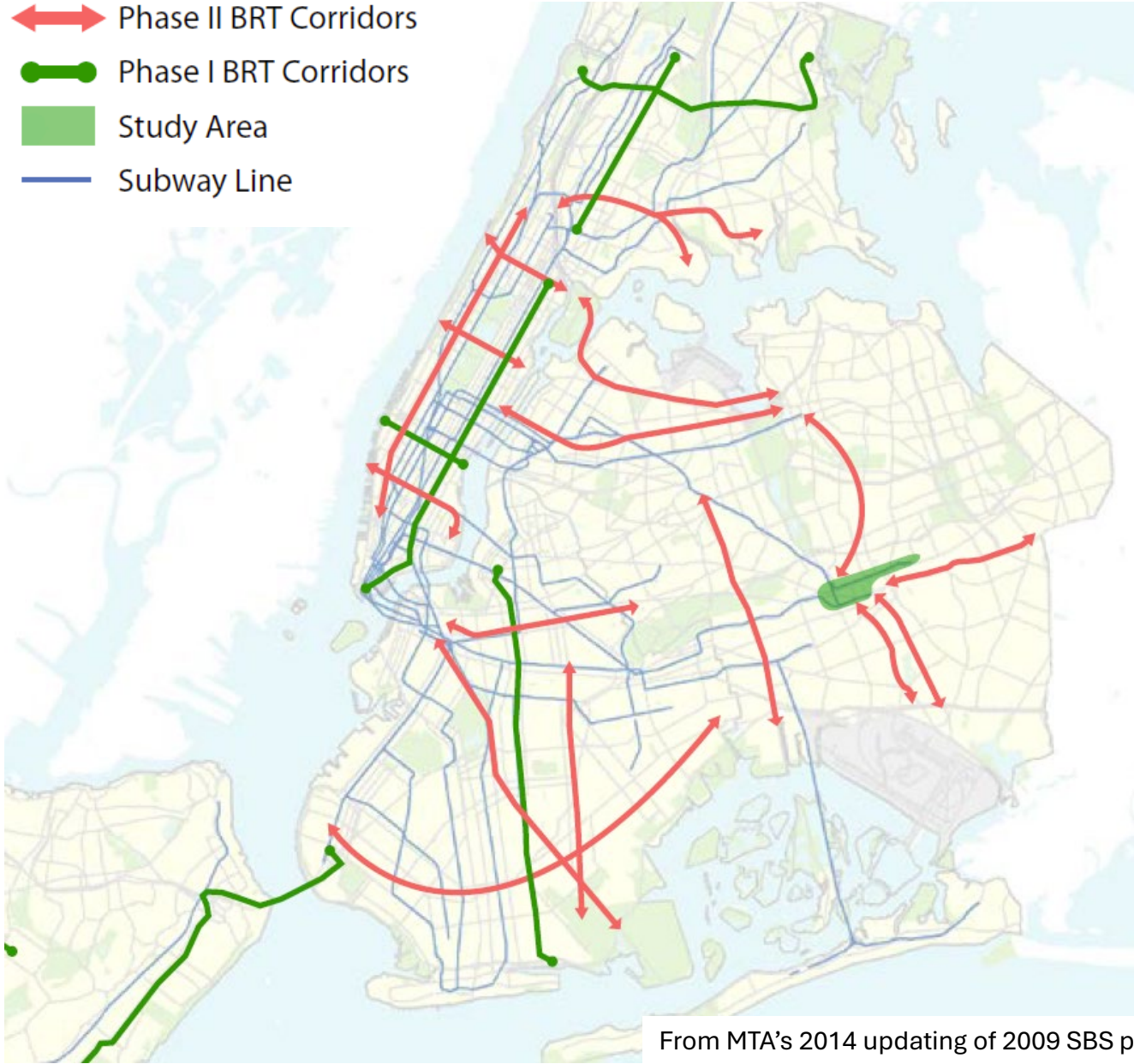
These routes formed something of a **network** with the subway system.



SBS Implementation Status

Key

- ↔ Phase II BRT Corridors
- Phase I BRT Corridors
- Study Area
- Subway Line



By 2015, the 6 Phase 1 SBS **routes** were complete. There was one in each borough.

By 2019, most of the Phase 2 SBS **routes** were also done.

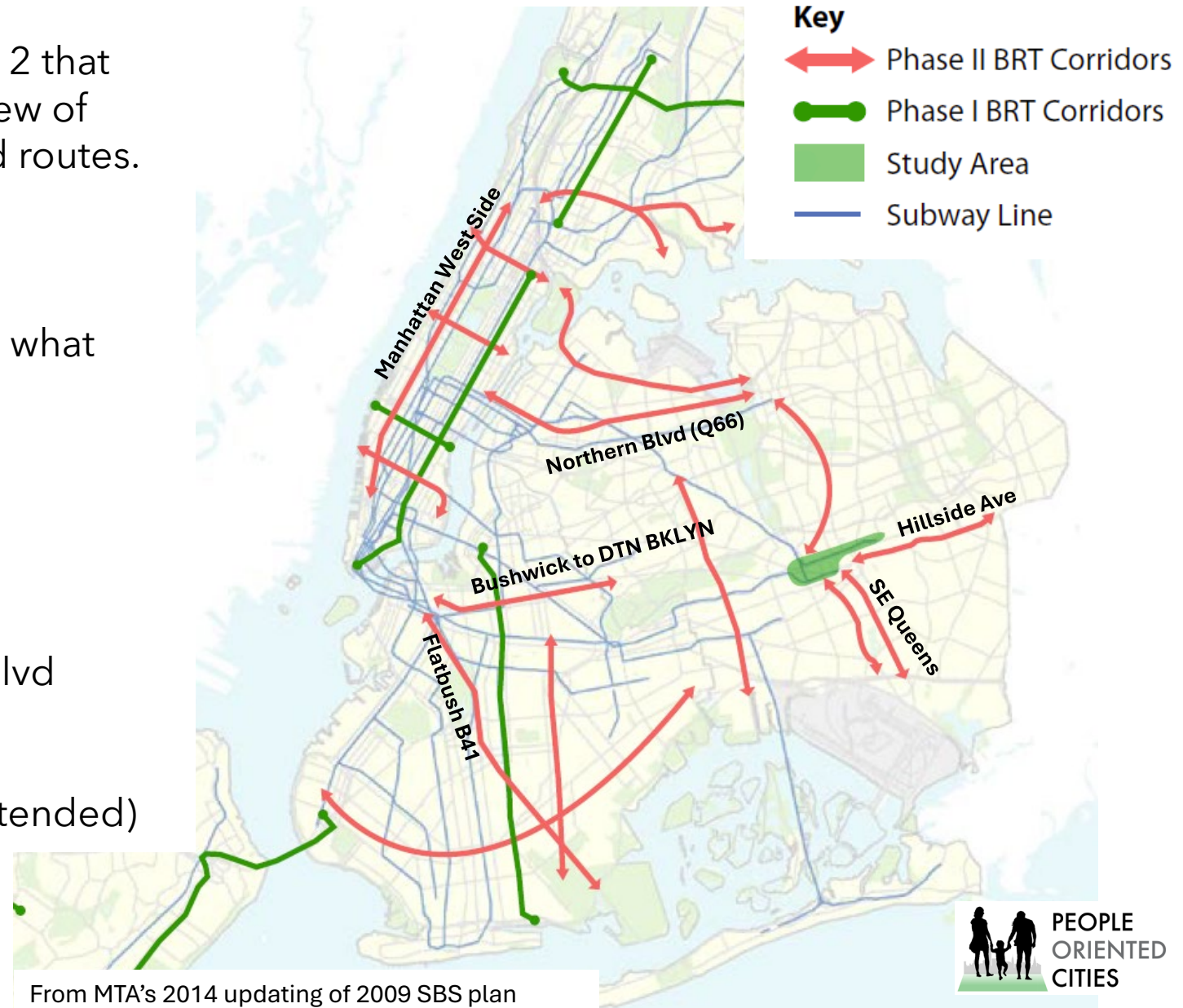
By then, the MTA was no longer talking about 'routes', it was talking about 'BRT Corridors.'

From MTA's 2014 updating of 2009 SBS plan

From Routes to Corridors

Of the 6 original SBS Routes identified for Phase 2 that had still not been implemented in 2019, only a few of them were associated with specific high demand routes.

- **Hillside Ave** (Lots of routes)
- **Bushwick to Downtown Brooklyn** (not clear what routes)
- **Flatbush Ave:** B41 LTD
- **Manhattan West Side:** Possibly M11
- **Southeast Queens:** Sutphin Blvd & Merrick Blvd (many routes)
- **Northern Boulevard to Manhattan:** (Q66 extended)



SBS in the Comptroller's Report

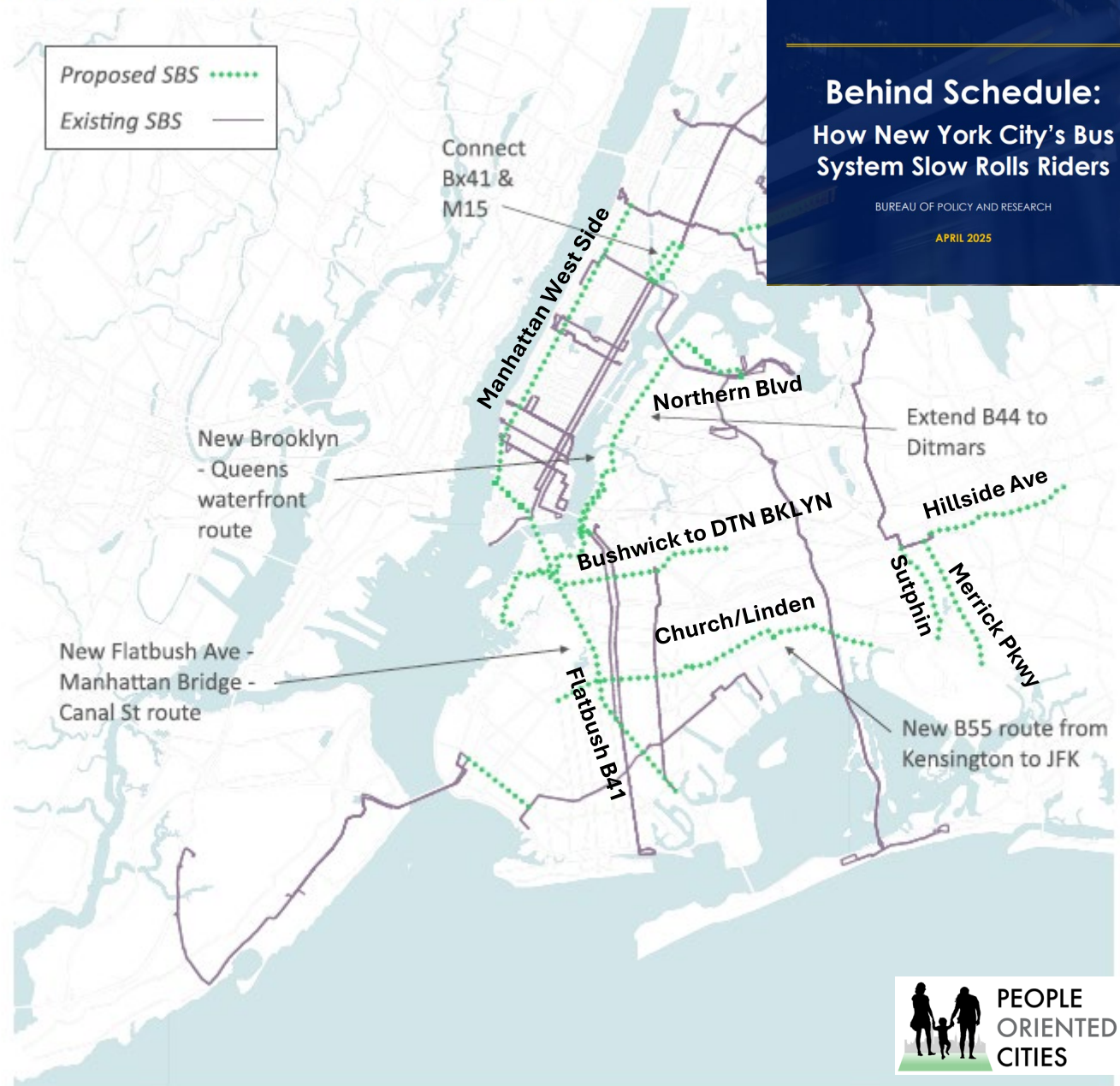
2025 Comptroller's report calls for completing all incomplete SBS routes.

Of the identified corridors, only Flatbush and Church/Linden were clearly associated with specific 'routes.'

The rest are clusters of routes.

They also showed new interborough service connections.

Figure 3: Proposed and existing SBS routes



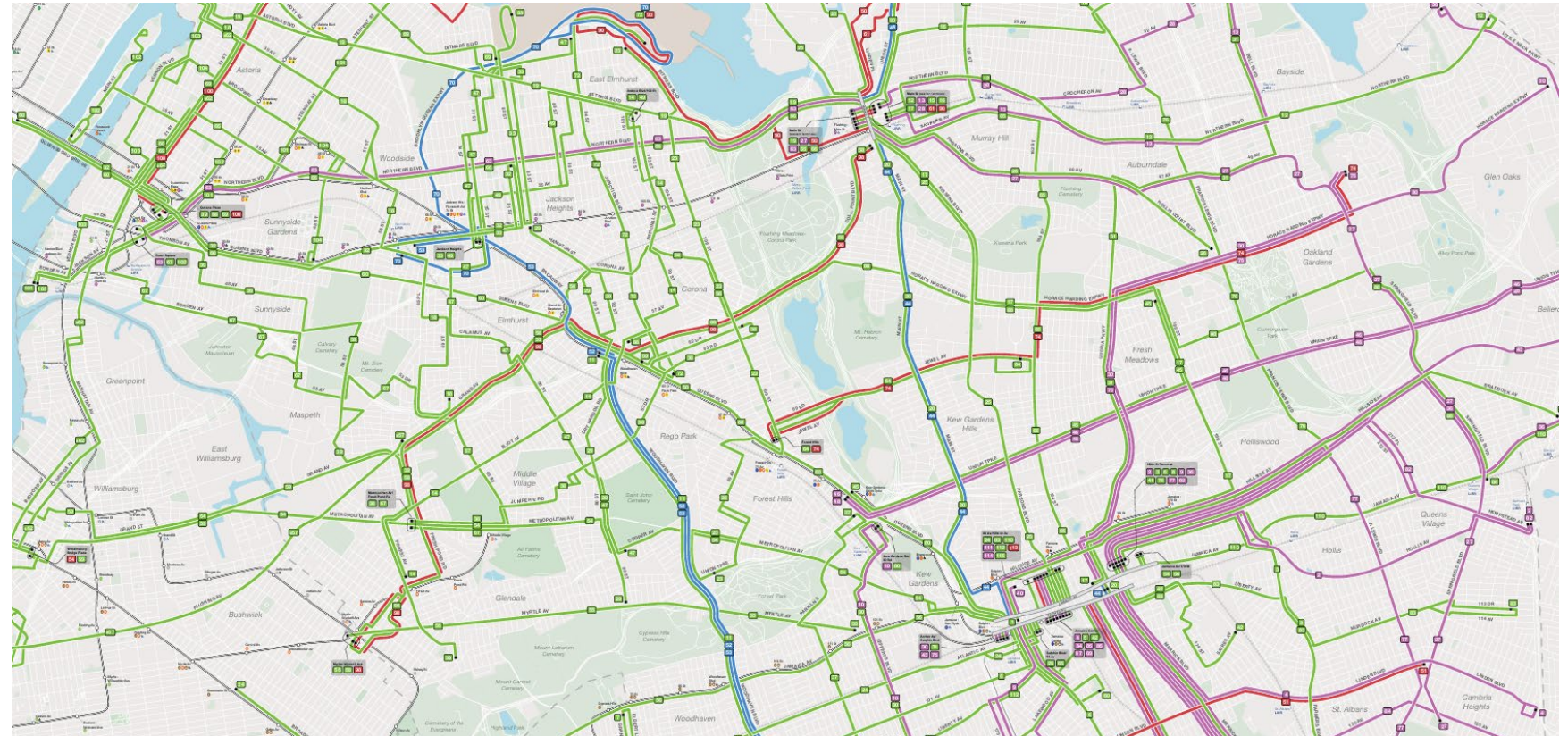
SBS and the Network Redesign

After 2019, MTA and NYC DOT shifted their bus program away from SBS and towards:

- Bus Network Redesign
- Bus Priority Corridors

How do these two programs relate to each other?

Queens Network Redesign



SBS and Network Redesign

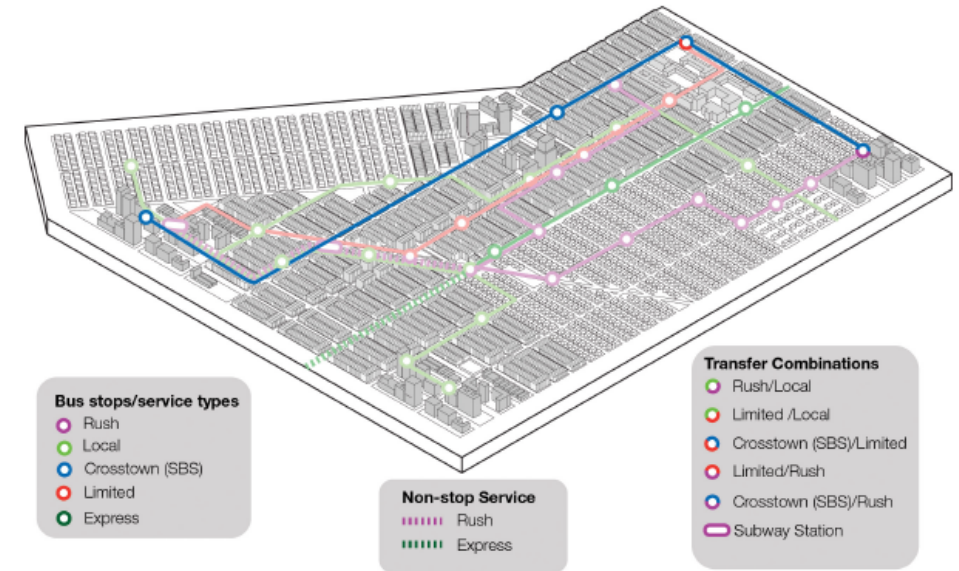
In the Brooklyn Bus Network Redesign, SBS is cobranding with a new route type called Crosstown (XT).

This is a **service** designation.

No specific bus priority measures are associated with this service designation.

Redesigning The Network

Route Type: Crosstown (SBS) Routes



The purpose of Crosstown (SBS) routes is to connect across the city as fast as possible between several important destinations, serving high-ridership, high-density corridors. To easily recognize these routes on a map, they are shown in a blue color. These routes have the widest bus stop spacing and all-day frequent service (between 6:00 AM and 8:00 PM on weekdays). Combined with Limited routes, they form a high-frequency core network. The average distance between stops on Crosstown (SBS) routes is approximately a 1/2-mile (2,640 feet).

SBS and Network Redesign

The B41 on Flatbush, where there are current bus priority plans, is listed as a 'crosstown' rather than an 'SBS' route. There is some confusion here.

Introducing The New Network

Route Improvement Summary Table

Proposed Route	More direct routing	New connections	Improved stop spacing	Improved frequency	Fewer route patterns	Avoids narrow streets	Improved ADA access	Priority Corridor
B1			X					
B3			X					
B4	X		X				X	X
B5 LTD	X	X	X			X		X
B6	X		X			X		X
B6 LTD	X		X			X		X
B7		X	X					
B8	X		X	X				X
B9			X	X				X
B10 LTD	X	X	X			X	X	X
B11	X		X					X
B12			X	X				X
B13	X	X	X	X		X		
B14		X	X	X			X	X
B15	X	X			X			X
B16	X	X	X	X		X	X	X
B17	X		X	X	X	X		X
B20 Rush	X		X	X	X	X		X
B25			X					X
B26 Rush	X	X	X	X			X	X
B27			X					X
B31			X					
B35		X	X	X	X			X
B36			X					X
B37			X					
B38			X		X	X		X
B39								
B40 Rush			X					X
B41	X		X		X			X
B41 XT	X		X		X			X
B42			X					X
B43			X					X
B44	X		X	X				X
B44 SBS		X	X	X			X	X
B45		X	X			X		X
B46			X					X
B46 SBS				X				X

XT refers to a Crosstown route (see page 29)

SBS and Network Redesign

The Queens Bus Network Redesign had a similar problem, but MTA removed 'Crosstown' from the list of route types in Queens, following our comments. They retained the SBS route designation on existing SBS routes, but downgraded other planned new SBS routes to 'Limited' routes.

So what is SBS anymore?

Introducing the New Network

Route Type: Local

The purpose of Local routes is to connect local neighborhoods, key transit hubs, and important destinations. To easily recognize these routes on a map, they are shown in a green color. Service frequencies are typically driven by ridership demand. The average distance between stops on Local routes is between 1,000 and 1,200 feet.

Route Type: Rush

The purpose of Rush routes is to connect quickly between outer borough neighborhoods and subway stations. To easily recognize these routes on a map, they are shown in a purple color. These routes pick up passengers locally and then skip stops to the subway, stopping only for major transfer points and key destinations. Along these "limited-stop" portions, Rush routes have underlying service from Local or Limited routes. These routes are typically more frequent in the AM and PM weekday peak period. The average distance between stops on Rush routes is between 1,000 and 1,200 feet.

Route Type: Limited

The purpose of Limited routes is to serve high-ridership, high-density corridors and connect quickly across the city. To easily recognize these routes on a map, they are shown in a red color. These routes have slightly wider stop spacing than Local routes, but not as wide as SBS routes, with stops located at high ridership locations and key transfer points and destinations. Service is frequent all day (between 6 AM and 9 PM on weekdays). The average distance between stops on Limited routes is between 1,200 and 1,500 feet.

Route Type: SBS/Crosstown

SBS/Crosstown routes connect across the city as fast as possible between several important destinations. To easily recognize these routes on a map, they are shown in a blue color. These routes have the widest bus stop spacing and most have all-day frequent service (between 6 AM and 9 PM on weekdays). Combined with Limited routes, they help form a high-frequency core network. The average distance between stops on SBS/Crosstown routes is between 1,700 ft and 2,600 feet.

Route Type: Express

The purpose of Express routes is to connect neighborhoods in the boroughs to the central business district in Manhattan with a one-seat ride. Express routes use coach buses and have a higher fare than local routes due to the longer distance they travel and the higher operational cost. In this plan we are showing the Express routes in four different colors, each based on their Manhattan destination: purple for 6th Avenue, light green for 5th Avenue and Madison Avenue, dark green for 3rd Avenue, and orange for downtown. These routes mostly offer peak hour service with frequency based on ridership demand. The average distance between stops on Express routes is approximately 1,600 feet in the local neighborhoods served, excluding the non-stop portion of the route on the highway.

Bus Priority Corridors: Queens Example

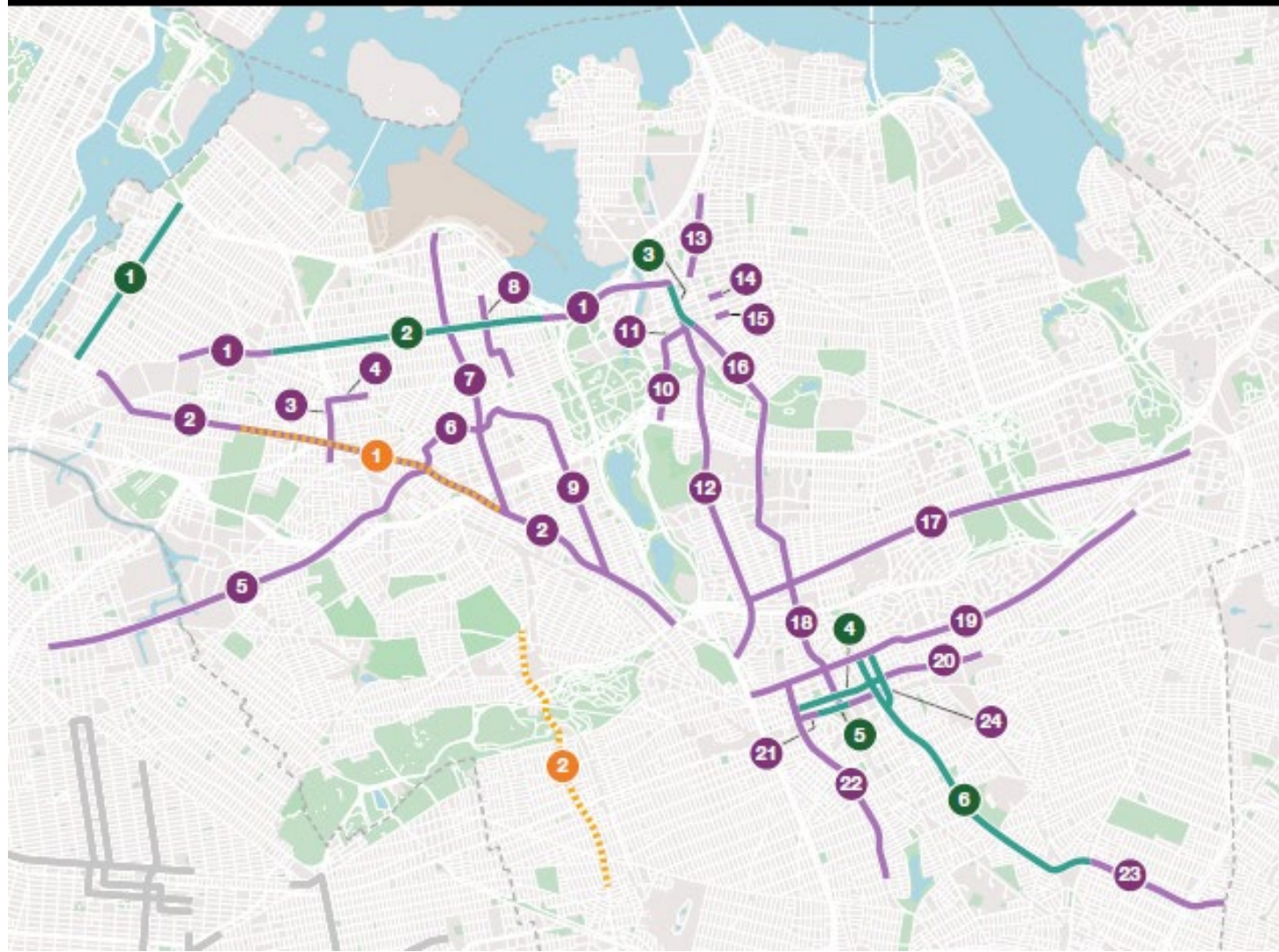
Starting in 2019, NYC DOT and the MTA stopped focusing bus priority measures only on SBS routes. Bus priority corridors and SBS services were de-linked.

MTA and DOT identified a set of bus priority *corridors* in the Queens Bus Network Redesign.

These priority corridors bear no relation to the SBS Routes.

Many are too short to be 'corridors.'

NYC DOT Queens Bus Priority Corridors

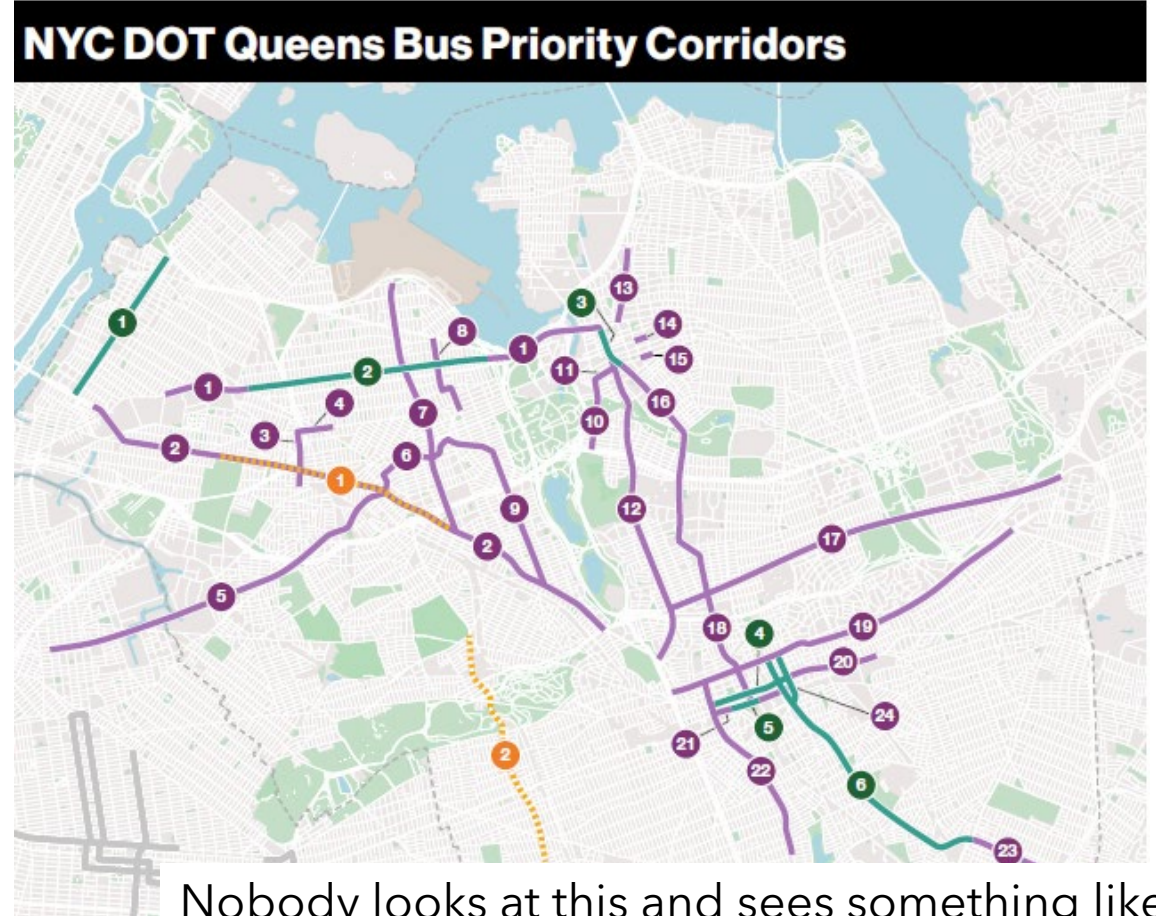


Bus Priority Corridors: Queens Example

While in 2014 the proposed 'BRT Corridors' formed something of a network with the Subway system...



The 2024 the 'Bus Priority Corridors' were bits and pieces of roads where bus priority measures would be useful, but the 'network' element is lost.



Nobody looks at this and sees something like an extension to the subway map.

Bus Priority Corridors: Queens Example

Queens Corridors: MTA (Priority Order)

Northern Blvd Ext.

Queens Blvd

69th St. Jackson Heights

Roosevelt Ave. Jackson Heights

Grand Ave.

Corona Ave/Broadway

Junction Blvd/94th St.

102nd st/37th Ave/104th St.

108th St.

College Pt W/Stanford Ave

Main St. Flushing

Union St.

Roosevelt Ave. E

Sanford Ave. E.

Kissena Blvd/Parsons Blvd

Union Turnpike

Parsons Blvd

Hillside Ave

Jamaica Ave Ext.

Archer Ave Ext.

Sutphin Ave Ext. S.

Merrick Blvd Ext.

Of the Queens bus priority corridors currently identified, only 3 (highlighted in blue) have SBS routes operating on them.

The remaining corridors will be used by Local, Rush, or Limited routes under the Network Redesign

Bus Priority Corridors

Bus Priority Corridors were prioritized based on the following criteria:

- Demand for bus service
- Bus performance
- Feasibility of implementing new street treatments including traffic levels and street widths
- The corridor's role in the transit network
- Neighborhood demographics and equity metrics

Reasonable criteria!

This came from the NYC Streets Plan of 2019 and was reiterated in the Queens Bus Network Redesign.

However, no weighting on the criteria or transparent analysis was publicly released. Further, the [2025 update to the Streets Plan](#) includes projects listed as completed that are not included in the original Street Plan. Nor do the [future projects listed on DOT's website](#) fully match those laid out in the original Streets Plan, and the reasons for the changes are never explained.

This report tries to make these and other criteria more transparent **so they can be discussed by stakeholders.**

Busways

NYC DOT started a Busway program in 2019.

- These were short segments of roads with lots of delay.
- They were turned into exclusive streets for buses and trucks.
- These were well targeted, but they didn't address one of the main cause of delay which was boarding delay.

Busways are different from BRT corridors mainly because they are short segments of overlapping bus routes. They do not form part of a rapid transit network.



Busways



Busways built since 2019:

- 14th St, Manhattan
- Jay St, Downtown Brooklyn
- Main Street, Flushing, Queens
- 181st St, Manhattan
- Jamaica Ave, Jamaica, Queens
- Archer Ave, Jamaica, Queens
- Livingston St, Downtown Brooklyn (2-way buses, 1 lane mixed traffic)

Busway that already existed:

- Fulton Mall

Busways under discussion

- 34th Street

Busways



There is a need for more dramatic BRT-type interventions in some short segments where a lot of bus routes converge.

They should be a target for BRT measures, but do not necessarily need to be a full busway.

Emphasis should be on simultaneously improving the public space!

BRT Corridor Prioritization: A Technical Perspective

How should BRT corridors be prioritized by the next administration?

How Much Faster Are We Moving?

An evaluation of bus priority
measures in New York City



Our last report recommended:

- Return to an approach where corridor-level bus priority measures form critical links in a rapid transit network. This will involve upgrade some corridors that already have SBS services and bus priority measures to full BRT
- Implement full BRT measures on short critical segments of high bus demand and major delay (mostly the busways).

Now we take this a few steps further.

Where should BRT corridors be prioritized?

1. Current demand
2. Includes highest volume links
3. Constructability (road width)
4. Serves affordable housing
5. Network (compliments the subway system)
6. Potential travel time savings
7. Cross section (easy to implement central median alignment)
8. Service Pattern (SBS, Limited, or Rush routes)
9. Political issues: (For discussion!)

Potential BRT Corridors with the Highest Existing Demand

Top 25 'Potential BRT Corridors' based on:

- Sections of road at least 1.9 miles* in length
- The highest volume of bus passengers (all the routes using the corridor)

* 1.9 Miles is defined by the BRT Standard. The metric is international so it is based on 3km.

Corridor	Section	Borough	# of Routes	Total Ridership
5th Ave & Madison	125th St. - 8th St.	M	7	47,560
1st and 2nd Avenue	Houston St. to 125th St.	M	2	32,298
Kissena Blvd/Parsons Blvd	Main St Flushing to Archer Ave	Q	3	31,009
3rd and Lexington	59th St. - 96th St.	M	3	29,056
Grand Ave/Corona	Metropolitan to 108 St.	Q	2	27,413
Flatbush, Livingston	Livingston to Grand Army Plaza	B	3	25,694
125th St	2nd Ave to Morningside Ave	M	3	25,240
Main St, Flushing	38th St to Kissena	Q	3	24,504
Hillside Ave	Queens Blvd - Springfield Blvd	Q	7	23,247
Merrick Blvd/189th	Hillside Ave to Belt Parkway	Q	6	21,885
Flatlands, Kings Highway	Ralph Ave to Gateway Center	B	2	21,084
Fordham Rd/Pelham Pkwy	Inwood to Coop City	Bx	1	18,388
Nostrand/Bedford	Ave Z/Ocean Pkwy-Williamsburg	B	2	17,121
Utica Ave, Malcolm X	Broadway to Kings Plaza	B	2	17,091
Bay Parkway/Cropsey Ave	Ave J-Shore Parkway; Bay Pkwy - 26th Ave	B	2	17,045
9th/10th Ave	14th St - 125th St	M	2	15,774
Lefferts	Kew Gardens - JFK	Q	1	14,434
Church Ave	McDonald Ave - JFK	B	1	14,171
Union Turnpike	Queens Blvd - Lake Success	Q	1+ Express	13,841
14th St, C & D	14th, Ave C/D to Canal	M	2	13,626
Queens Blvd	Queensboro Bridge - Jamaica	Q	7	13,618
Northern Blvd	59th St Man - Bayside	Q	1	13,338
Grand Concourse	Jerome Ave - E. 38th St	Bx	2	13,117
86th St	West End Ave - East End Ave	M	1	13,016
108th St	Queens Blvd - LGA	Q	1	12,569

Highest Demand Manhattan

1. Fifth & Madison
2. 1st & 2nd Ave
4. 3rd & Lexington
7. 125th St
16. 9th & 10th Ave.
20. 14th & Ave C/D
24. 86th St.

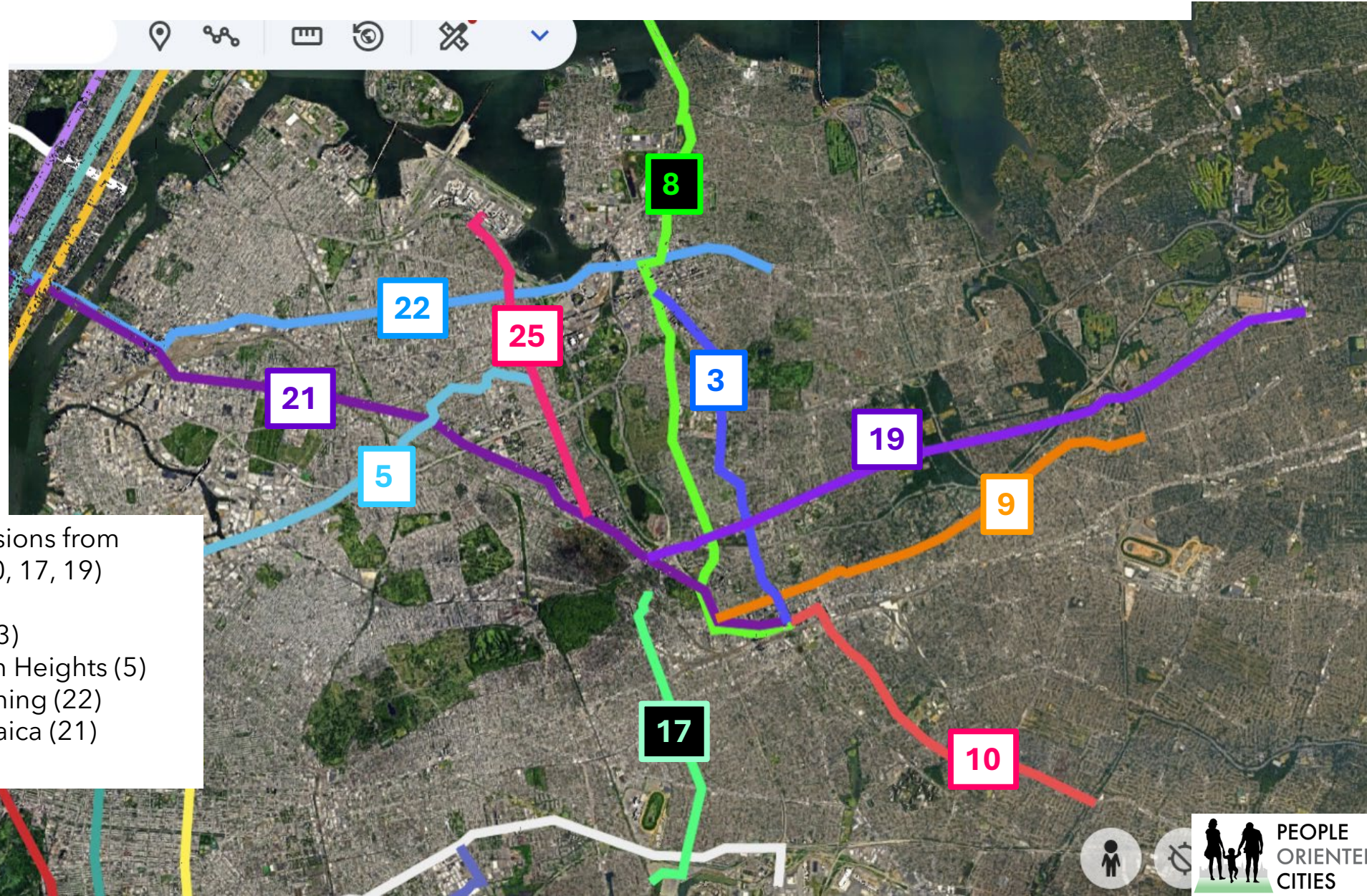
4 of these are N-S arterials (1, 2, 4, 16)
Three are popular Crosstown buses. (7, 20, 24)
An SBS service already runs down 2, 7, 20, and 24.



Highest Demand Queens

(Number shows rank)

- 3. Kissena Blvd
- 5. Grand Ave/Corona
- 8. Main St
- 9. Hillside Ave
- 10. Merrick Pkwy
- 17. Lefferts Blvd
- 19. Union Turnpike
- 21. Queens Blvd
- 22. Northern Blvd
- 25. 108th St.



- Four of these are subway extensions from Jamaica or Kew Gardens: (9, 10, 17, 19)
- Five serve popular OD Pairs
 - Jamaica to Flushing (8, 3)
 - Williamsburg to Jackson Heights (5)
 - Long Island City to Flushing (22)
 - Long Island City to Jamaica (21)
- One is an SBS Route (8).

Highest Demand Bronx

(Number shows rank)

8. (Main St Flushing Extension)
12. Fordham Rd/Pelham Parkway
23. Grand Concourse

- One is a North - South Arterial (23)
- One is a major East-West arterial (12)
- One is the interborough connection to Flushing and Jamaica (8)
- One is already an SBS Route (12)



Highest Demand: Brooklyn

(Number shows rank)

- 6. Flatbush
- 11. Kings Highway/Flatlands
- 13. Nostrand/Bedford
- 14. Utica/Malcolm X
- 15. Bay Parkway/Copsey
- 18. Church Ave/Linden

3 are popular North - South Arterials (6, 13, 14)
2 are major East-West arterials that provide
circumferential connections to the subway (11, 18)
1 is a subway extension (15)
3 already are SBS routes (11, 13, 14,)

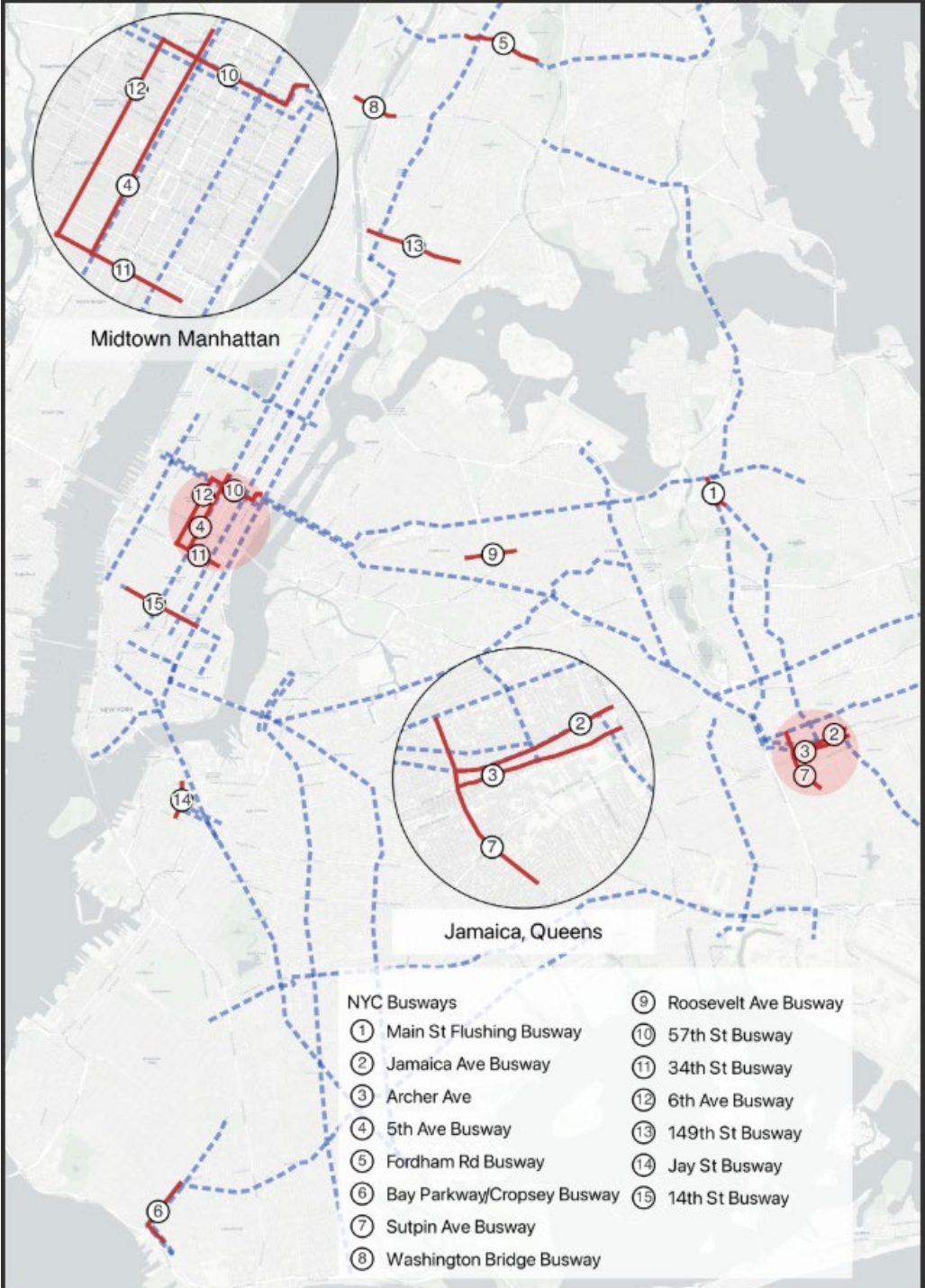
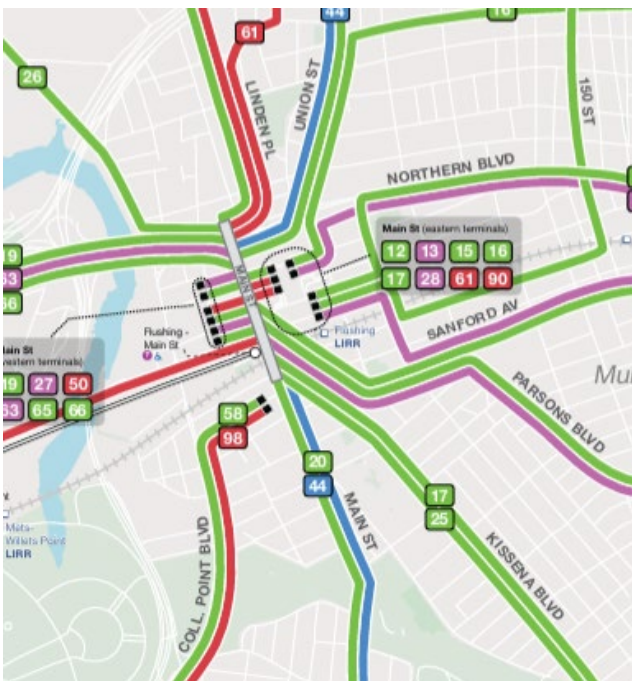


Includes Highest Volume Links

On many corridors, there is a short section with very high volumes of buses.

This is usually where many routes overlap.

Full BRT measures in these segments would bring huge benefits



Includes Highest Volume Links

Corridor	Section	Borough	# Routes	Daily Ridership
Main St, Flushing	38th St to Kissena	Q	14	101,573
Jamaica Ave	Sutphin Blvd - 169th	Q	13	88,982
Archer Ave	LIRR Jamaica - Merrick Blvd	Q	14	68,928
Kissena Blvd/Parsons Blvd	Main St Flushing to Archer Ave	Q	3	48,189
5th Ave	59th - 34th St	M	5	47,560
Fordham Rd/Pelham Pkwy	Southern Blvd-Grand Concourse	Bx	7	37,557
Bay Parkway/Crosey	Crosey to Kings Highway	B	2	37,125
Sutphin Blvd	Hillside Ave to 109th	Q	5	36,926
Washington Bridge, 181st	Broadway to EL Grant Highway	M	5	30,862
Livingston	Court St - Flatbush	B	4	28,108
Fulton Mall	Court to Flatbush	B	4	26,712
Roosevelt Ave Jackson Heights	69th St - 82nd St	Q	4	26,036
149th St.	Prospect Ave - Major Deegan	Bx	3	25,731
57th St.	11th - York	M	3+express	20,804
6th Ave.	31st - 44th	M	3+express	19,473
Jay St.	Livingston - Tillary	B	4	18,356
34th St.	6th Ave to 2nd Ave	M	1+express	16,623
14th St.	3rd Ave to 8th Ave	M	2	13,686

Orange color indicates it is already a busway

Includes Highest Volume Links

Corridor	Section	Borough	# Routes	Daily Ridership	Points for MCA
Main St, Flushing	38th St to Kissena	Q	14	101,573	10
Jamaica Ave	Sutphin Blvd - 169th	Q	13	88,982	9
Archer Ave	LIRR Jamaica - Merrick Blvd	Q	14	68,928	7
Kissena Blvd/Parsons Blvd	Main St Flushing to Archer Ave	Q	3	48,189	5
5th Ave	59th - 34th St	M	5	47,560	5
Fordham Rd/Pelham Pkwy	Southern Blvd-Grand Concourse	Bx	7	37,557	4
Bay Parkway/Cropsy	Cropsey to Kings Highway	B	2	37,125	4
Sutphin Blvd	Hillside Ave to 109th	Q	5	36,926	4
Washington Bridge, 181st	Broadway to EL Grant Highway	M	5	30,862	3
Livingston	Court St - Flatbush	B	4	28,108	3
Fulton Mall	Court to Flatbush	B	4	26,712	3
Roosevelt Ave Jackson Heights	69th St - 82nd St	Q	4	26,036	3
149th St.	Prospect Ave - Major Deegan	Bx	3	25,731	3
57th St.	11th - York	M	3+express	20,804	2
6th Ave.	31st - 44th	M	3+express	19,473	2
Jay St.	Livingston - Tillary	B	4	18,356	2
34th St.	6th Ave to 2nd Ave	M	1+express	16,623	2
14th St.	3rd Ave to 8th Ave	M	2	13,686	1

Road width on potential BRT Corridors

Streets need to be:

- 2-way streets with ≥ 100 feet width, or
- 1-way streets with ≥ 80 feet width, or
- Narrower streets with a parallel street running the full length of the corridor

Corridors that do not meet these criteria have been dropped from further analysis.
(shown in grey to the right)

Roads with parallel streets have the option of diverting traffic to a parallel street.
(this will become important later)

Corridor	Width (feet)	1-way or 2-way	Parallel Street (Y/N)
5th Ave & Madison	80	1	Y
1st and 2nd Avenue	100	1	Y
Kissena Blvd/Parsons Blvd	80	2	N
3rd and Lexington	80	1	Y
Grand Ave/Corona	80	2	N
Flatbush, Livingston	100	2	N
125th St	100	2	Y
Main St, Flushing	100	2	N
Hillside Ave	115	2	N
Merrick Blvd/189th	100	2	N
Flatlands, Kings Highway	100	2	N
Fordham Rd/Pelham Pkwy	100	2	N
Nostrand/Bedford	80	1	Y
Utica Ave, Malcolm X	100	2	Y
Bay Parkway/Cropsey ave	90	2	N
9th/10th Ave	100	1	Y
Lefferts	80	2	N
Church Ave	80	2	Y
Union Turnpike	90	2	N
14th St, C & D	100	2	Y
Queens Blvd	200	2	N
Northern Blvd	100	2	N
Grand Concourse	180	2	N
86th St, Manhattan	100	2	Y
108th St, Queens	80	2	N

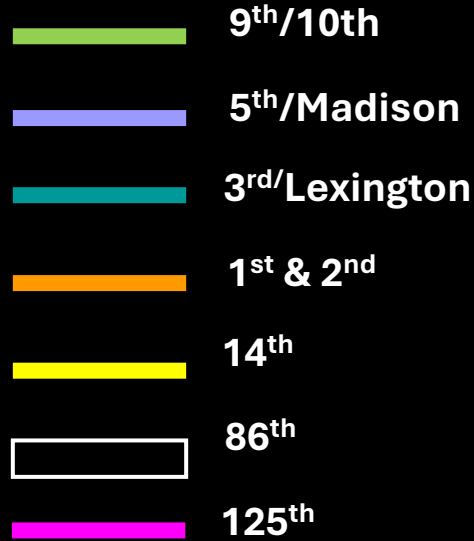
Serves Affordable Housing Manhattan

New and existing affordable housing is a good proxy for both equity and future demand growth.

Of the high-demand corridors, these areas are served by (in rank order):

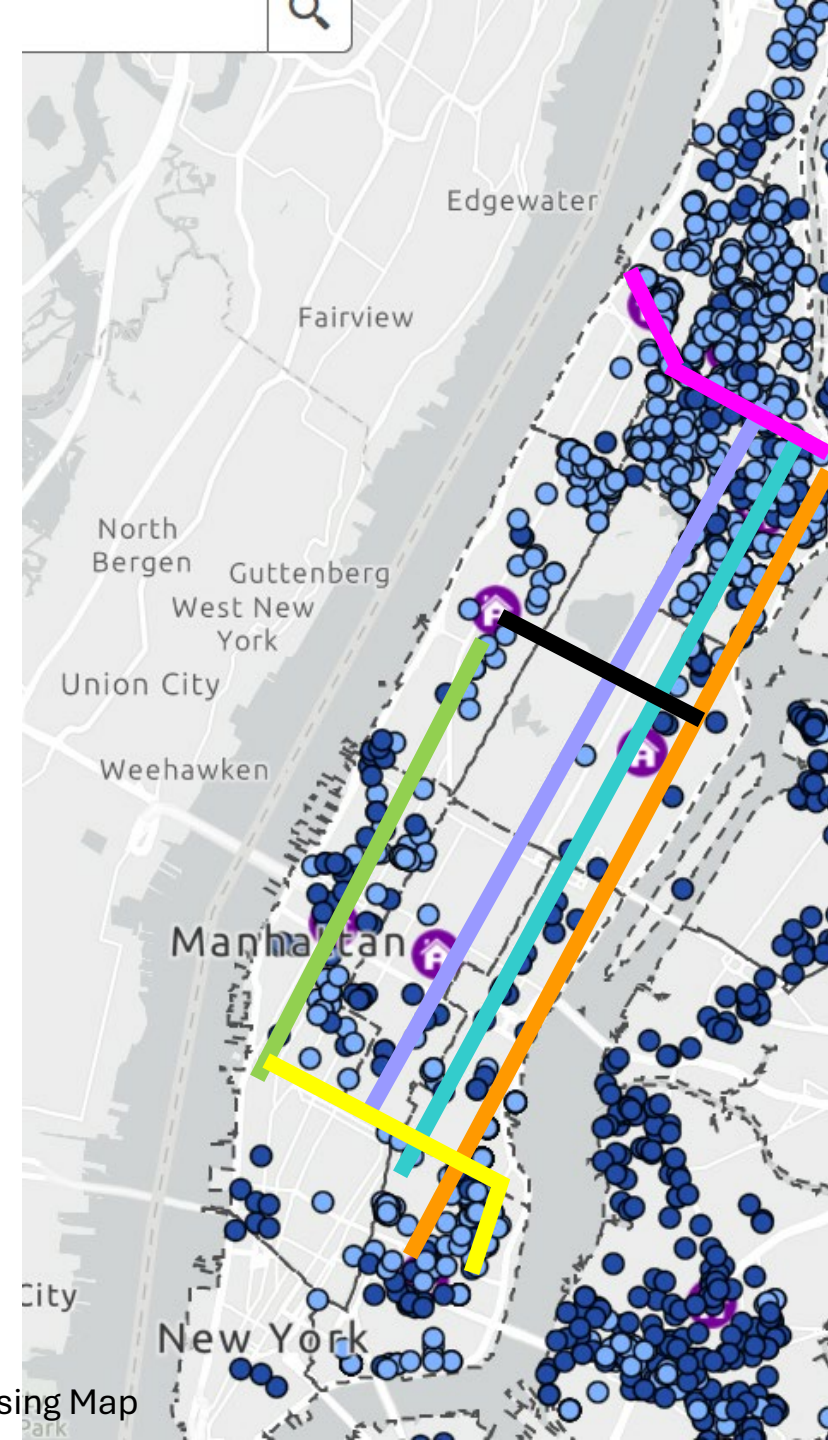
- 125th St
- 9th/10th
- 3rd/Lex
- 1st/2nd Aves
- 5th/Madison

Potential BRT Corridors



Affordable Housing Production Buildings

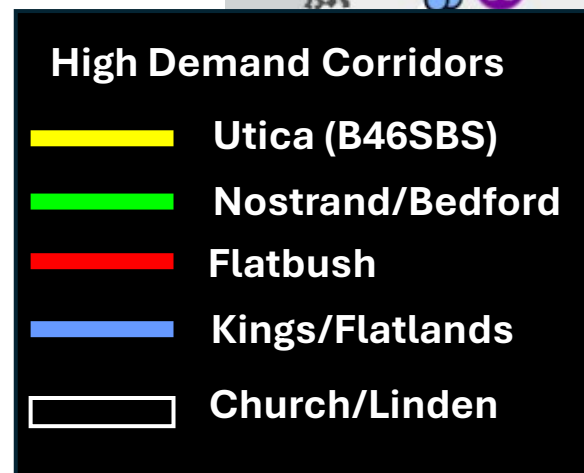
- New Construction
- Preservation



Serves Affordable Housing Brooklyn

Of the high-demand corridors, these
areas are served by (in rank order):

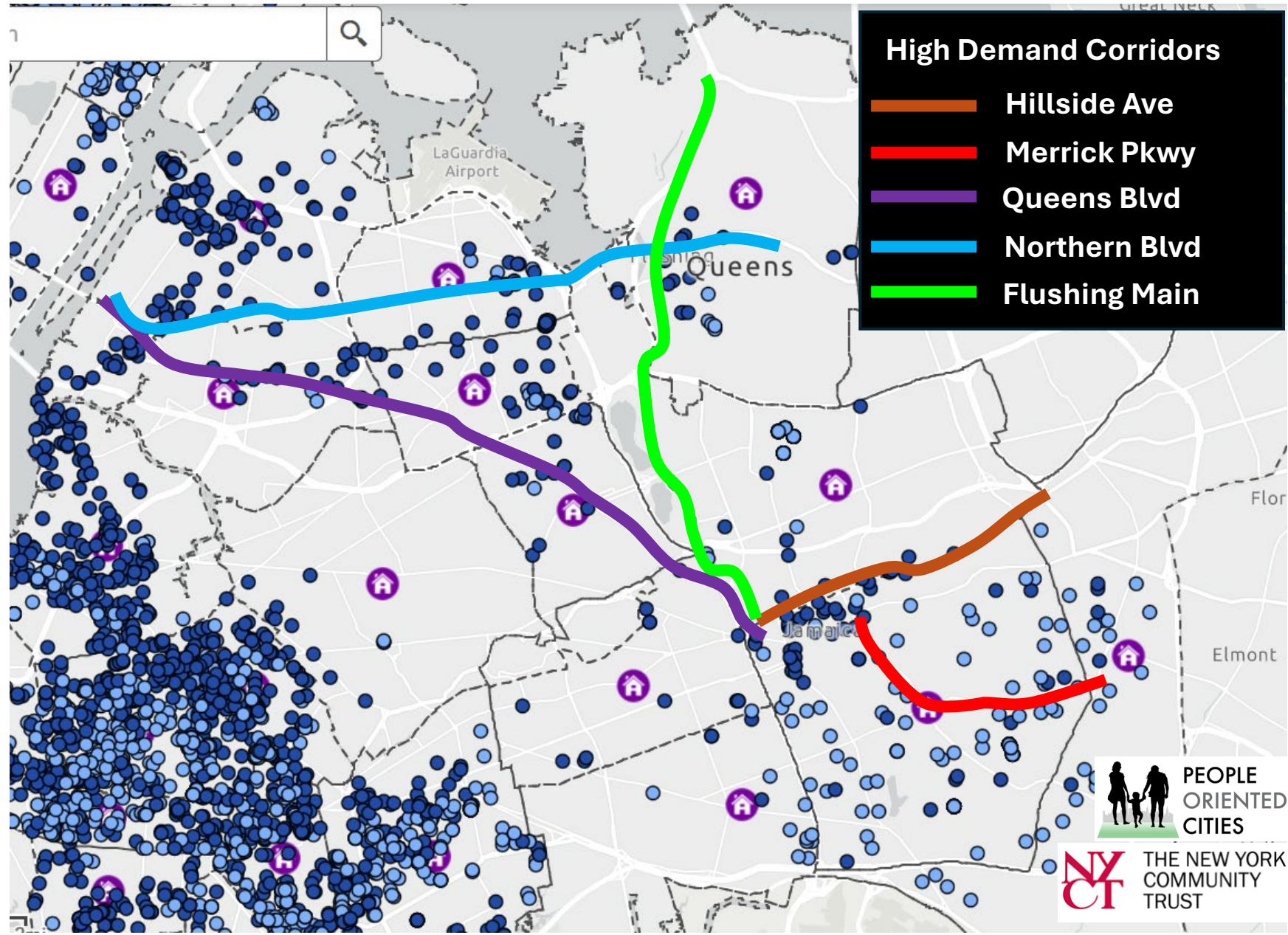
- Nostrand/Bedford
- Utica
- Flatbush
- Church/Linden
- Kings/Flatlands



Serves Affordable Housing Queens

Of the high-demand corridors, affordable housing areas are best served by (in rank order):

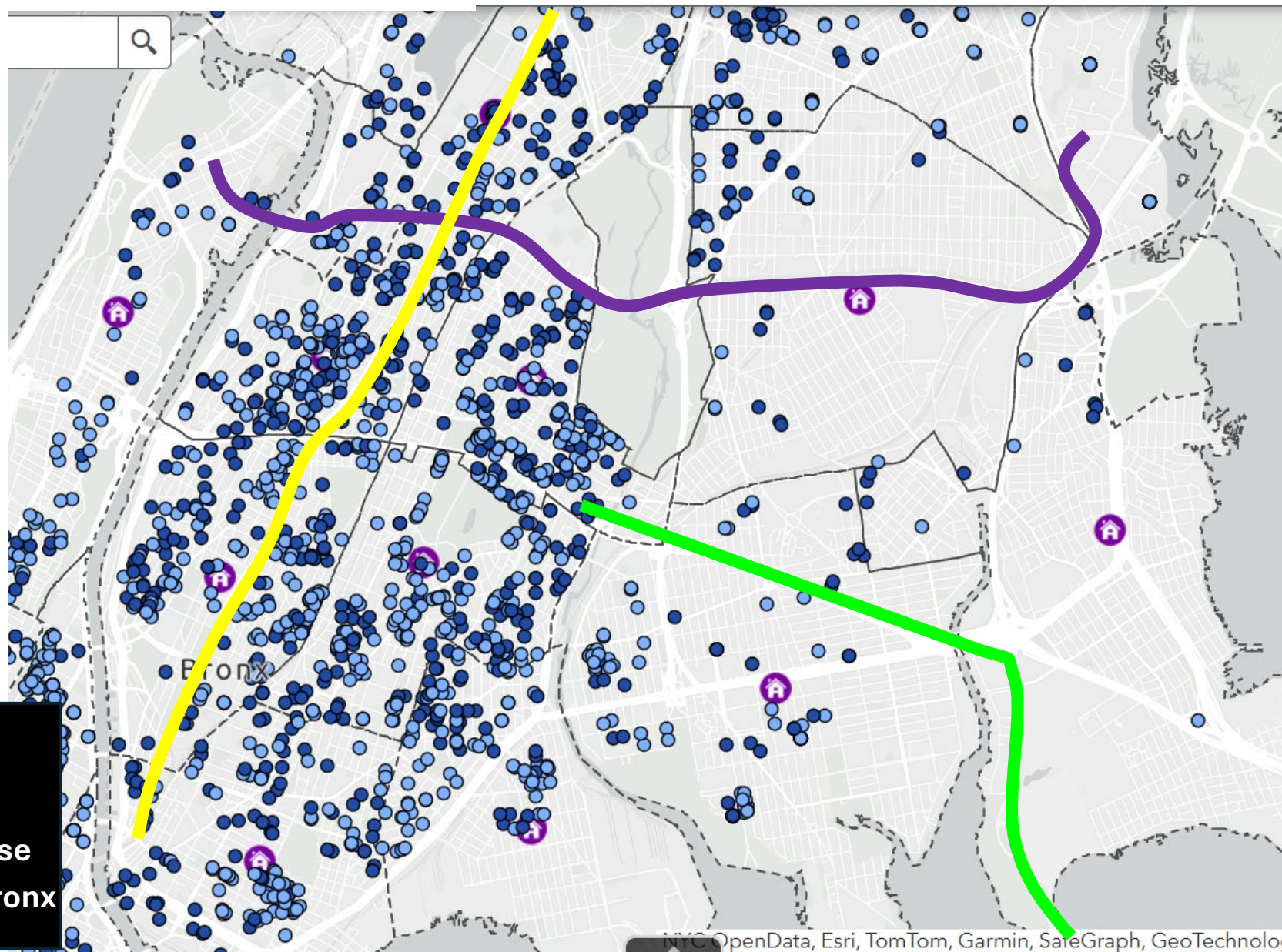
- Hillside
- Merrick
- Northern Blvd
- Queens Blvd



Serves Affordable Housing Bronx

Of the high-demand corridors, these areas are served by (in rank order):

- Grand Concourse
- Fordham Rd

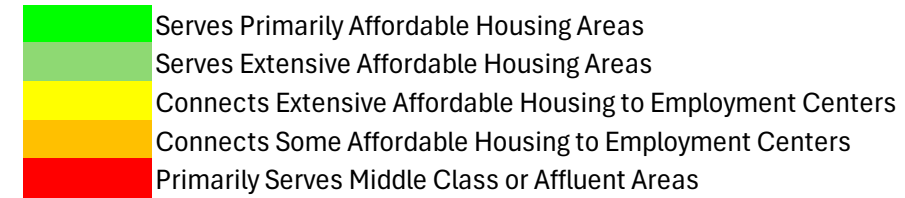


High Demand Corridors

-  Fordham Rd
-  Grand Concourse
-  Jamaica to W Bronx

Potential BRT Corridors Ranked by How Well They Serve Affordable Housing

Corridor	Affordable Housing Overlap
125th St	5
Nostrand/Bedford	5
Grand Concourse	5
Utica Ave, Malcolm X	4
Church Ave	4
1st and 2nd Avenue	3
Flatbush, Livingston	3
Hillside Ave	3
Fordham Rd/Pelham Pkwy	3
9th/10th Ave	3
14th St, C & D	3
3rd and Lexington	2
Merrick Blvd/189th	2
Queens Blvd	2
Northern Blvd	2
5th Ave & Madison	1
Main St, Flushing	1
Flatlands, Kings Highway	1
86th St, Manhattan	1



Network Effects Manhattan

1st & 2nd Ave complete the 2nd Ave Subway

A 9th & 10th Ave corridor to 72nd St completes the west side service grid

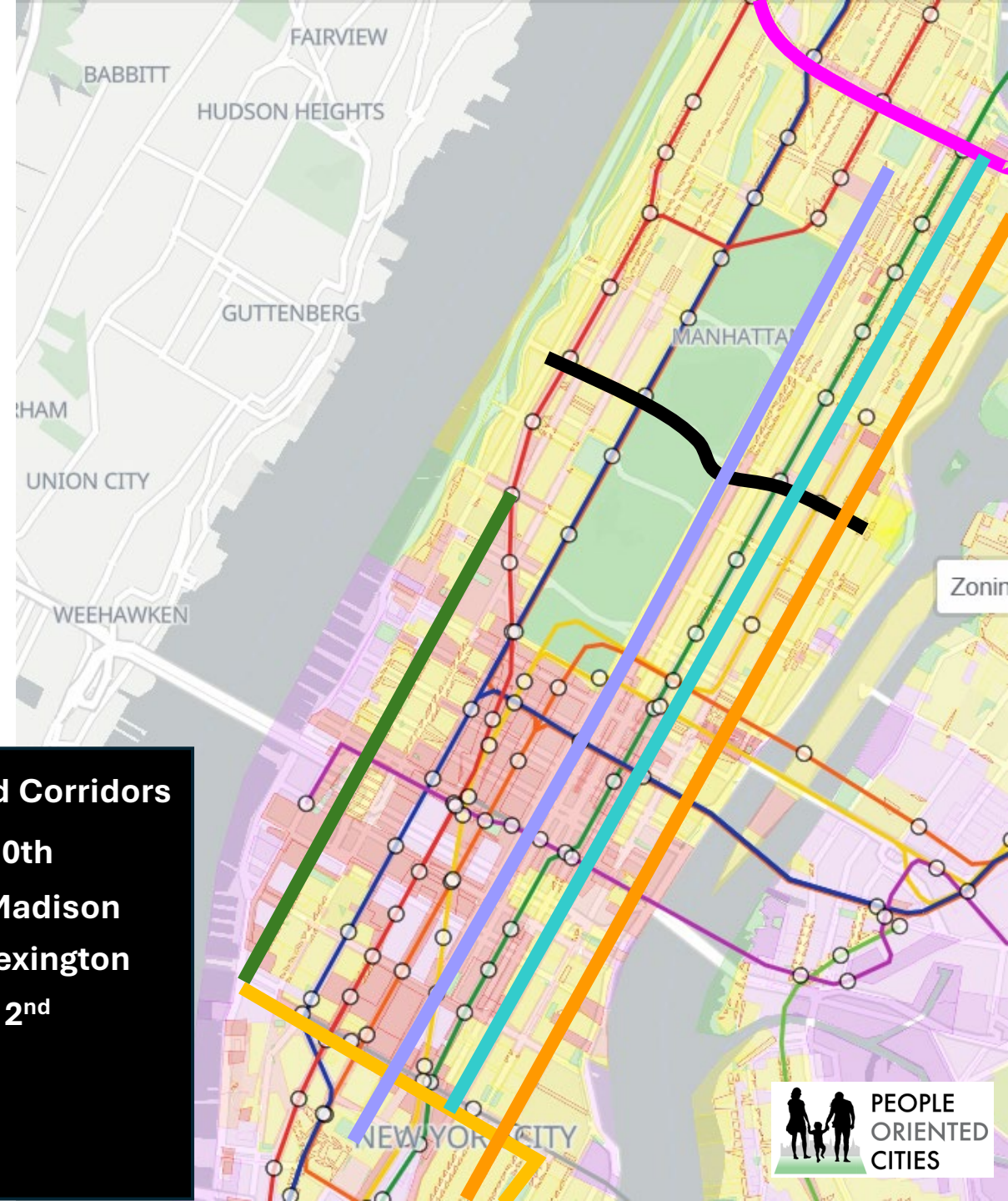
125th & 86th provide missing crosstown links to the rapid transit network

5th & Madison and 3rd & Lex are close to the 4,5,6 but that line is very crowded.

14th St. overlaps the L Train, but the service turns south to provide access to dense housing on Aves C & D.

High Demand Corridors

- 9th/10th
- 5th/Madison
- 3rd/Lexington
- 1st & 2nd
- 14th
- 86th
- 125th



Network Effects

Brooklyn

Utica completes a missing link in the subway network.

Outer Flatbush complements the subway, the inner part overlaps.

Nostrand connects Williamsburg to Central Brooklyn but partially overlaps the subway.

Church/Linden and Kings/Flatlands complement the subway network but miss some connections.



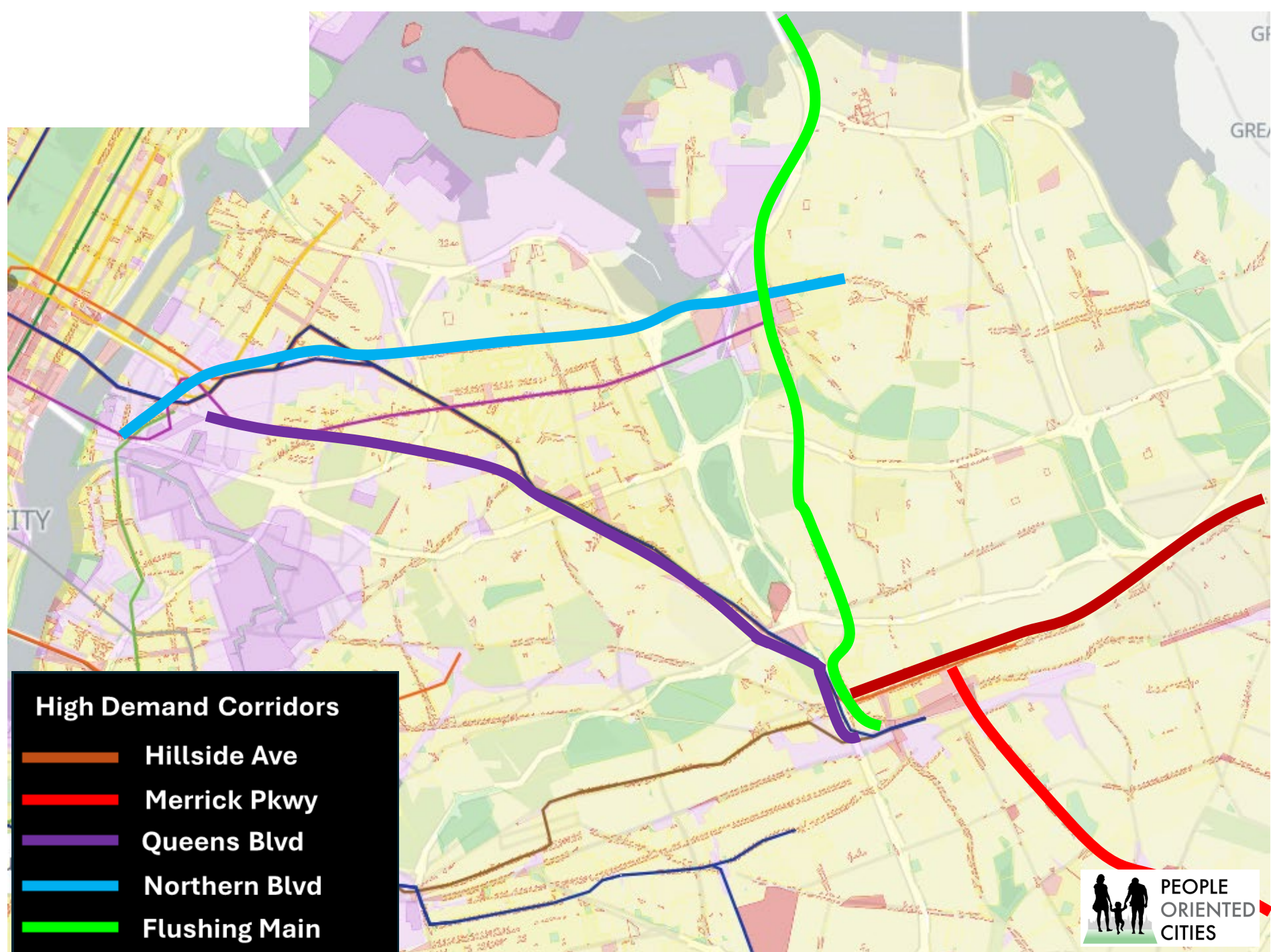
Network Effects Queens

Flushing Main provides critical missing link between Jamaica and Flushing subway termini

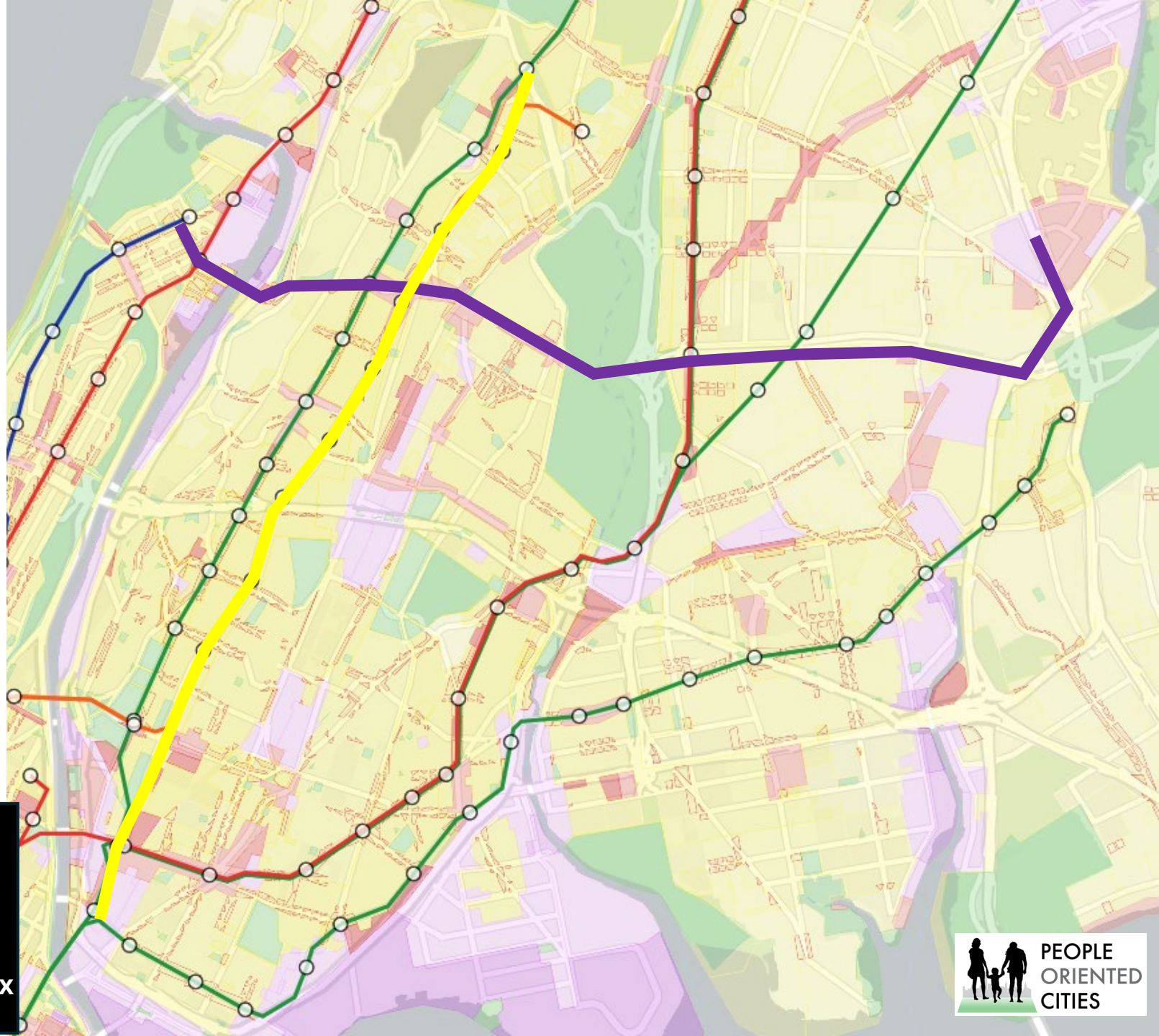
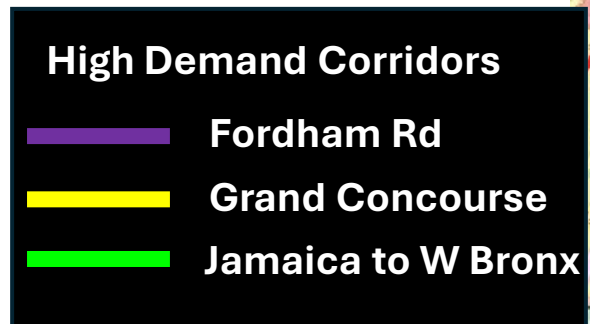
Northern Blvd links Flushing & Jackson Heights to LIC but parallel to 7 train.

Merrick and Highland Blvd are subway extensions.

Lefferts fills a gap in the transit grid.



Network Effects Bronx



Network Effects

Corridor Ranking

5	Fully Overlaps the Subway
4	Mostly Overlaps the Subway
3	Partially Overlaps the Subway
2	Fills Some Gaps in the Subway
1	Fills an Important Gap in the Subway

Corridor	Network Score
125th St,	5
Main St, Flushing,	5
Merrick Blvd/189th,	5
Flatlands, Kings Highway	5
Fordham Rd/Pelham Pkwy,	5
Utica Ave , Malcolm X	5
Church Ave	5
86th St, Manhattan	5
Hillside Ave,	4
1st and 2nd Avenue,	3
9th/10th Ave	3
Flatbush, Livingston	3
Nostrand/Bedford	3
Queens Blvd	3
Northern Blvd	3
5th Ave & Madison	2
14th St, C & D	2
Grand Concourse	1
3rd Ave, Lexington	1

Potential Speed Increase with Full BRT

Corridor Ranking

Methodology for calculating potential speed increase (segment-level) as follows:

- Begin with free-flow car speed measured at 3am
- Add 12s fixed dwell time per stop
- Add 0.3s per passenger boarding
- Subtract from existing bus speed on that segment

This assumes that the BRT measures will remove congestion-related delay and boarding-related dwell time.

Corridor	Potential Speed Increase (mph)
Church Ave	8.97
125th St	7.29
Fordham Rd/Pelham Pkwy	6.8
1st and 2nd Avenue	6.6
3rd & Lex	5.85
9th & 10th Ave	5.74
Grand Concourse	5.71
Northern Boulevard	5.7
Merrick Blvd/189th	5.42
Flatbush	4.94
Nostrand/Bedford	4.9
86th St, Manhattan	4.33
5th Ave & Madison	4.2
Queens Boulevard	3.875
Main St, Flushing	3.55
14th St	3.25
Flatlands, Kings Highway	3.01
Hillside Ave	1.81

Potential Speed Gain

Hillside Ave already has reasonably high speed. Planned “Rush” route will eliminate stops and related delay.

Main St. Flushing & Kings Hwy already have offset bus lanes and reasonably high speeds except on and approaching the busway.

Church Ave, 125th St, Fordham Rd, 1st/2nd Ave, Utica have significant potential time savings, due to high volumes of boarding passengers.

Service Type Corridor Ranking

BRT works best with SBS, Limited, or Rush routes.

- SBS = 5 pts
- Limited & Rush = 4 pts

BRT doesn't work well with Express routes: makes few stops on the BRT corridor -> little time savings benefit from BRT stations.

BRT doesn't work well with Local routes: too many stations to build, a lot of delay related to the stops.

- Express = 1 pt
- Local = 1 pt

Corridor	Route Type(s)		Score
1st and 2nd Avenue	SBS	Lcl	5
125th St	SBS	Lcl	5
Main St, Flushing	SBS	Lcl	5
Fordham Rd/Pelham Pkwy	SBS	Lcl	5
Flatbush	SBS	Lcl	5
Utica Ave, Malcolm X	SBS	Lcl	5
Flatlands, Kings Highway	SBS	Lcl	5
86th St, Manhattan	SBS	-	5
Nostrand/Bedford	SBS	Lcl	5
Church Ave/Linden	SBS	Lcl	5
14th St	SBS	Lcl	5
Merrick Blvd/189th	Rush	Lcl	4
Hillside Ave,	Rush	Lcl	4
Northern Boulevard	Rush	Lcl	4
Grand Concourse	Ltd	Lcl	4
5th & Madison	Lcl	Exp	1
Queens Boulevard	Exp	Lcl	1
5th & Madison	Exp	Lcl	1
3rd & Lex	Lcl	-	1
9th & 10th Ave	Lcl	-	1

Cross Section Type

BRT is harder to design on 1-way streets.

While there are plenty of BRTs with sections on 1-way streets, there is no clearly preferable central-median alignment alternative.

Corridor	2-way or 1-way	Score
Hillside Ave	2	5
125th St	2	5
Merrick Blvd/189th	2	5
Main St, Flushing	2	5
Fordham Rd/Pelham Pkwy	2	5
Flatbush	2	5
Utica Ave, Malcolm X	2	5
Flatlands, Kings Highway	2	5
86th St, Manhattan	2	5
Church Ave/Linden	2	5
Northern Boulevard	2	5
Grand Concourse	2	5
Queens Blvd	2	5
14th St	2	5
1st and 2nd Avenue	1	1
Nostrand/Bedford	1	1
3rd & Lexinton	1	1
5th & Madison	1	1
9th & 10th Ave	1	1

Multicriteria Analysis

Corridor Rankings

Rank	Corridor	Corridor Ridership	Includes High Demand Links	Network	Road Width	Affordable Housing Overlap	Potential Speed Increase	2-way or 1-way	Route Type	Total
1	125th St	17	3	5	5	5	7	5	5	52
2	Main St, Flushing & Kissena Spur	16	10	5	5	1	4	5	5	51
3	5th & Madison w 34th St Spur	32	5	2	3	1	4	1	1	49
4	Merrick Blvd & Archer Ave	15	7	5	5	2	5	5	4	48
5	1st and 2nd Avenue	22	1	3	6	3	7	1	5	47
6	Hillside Ave & Jamaica Ave	15	7	4	6	3	2	5	4	46
7	Flatbush, Livingston, Fulton, Jay	17	3	3	5	3	5	5	5	46
8	Fordham Rd/Pelham Pkwy	12	4	5	3	3	7	5	5	44
9	Utica Ave, Malcolm X	11	1	5	5	4	6	5	5	43
10	Church Ave / Linden	9	1	5	2	4	9	5	5	40
11	Flatlands, Kings Highway	14	1	5	3	1	3	5	5	37
12	Grand Concourse	9	1	1	6	5	6	5	4	36
13	3rd & Lex	19	3	1	3	2	6	1	1	36
14	86th St, Manhattan	9	1	5	5	1	4	5	5	35
15	Nostrand/Bedford	11	2	3	3	5	5	1	5	35
16	Northern Boulevard	9	1	3	5	2	6	5	4	34
17	14th St	9	1	2	5	3	3	5	5	34
18	9th & 10th	11	1	3	6	3	6	1	1	31
19	Queens Blvd	9	1	3	6	2	4	5	1	30

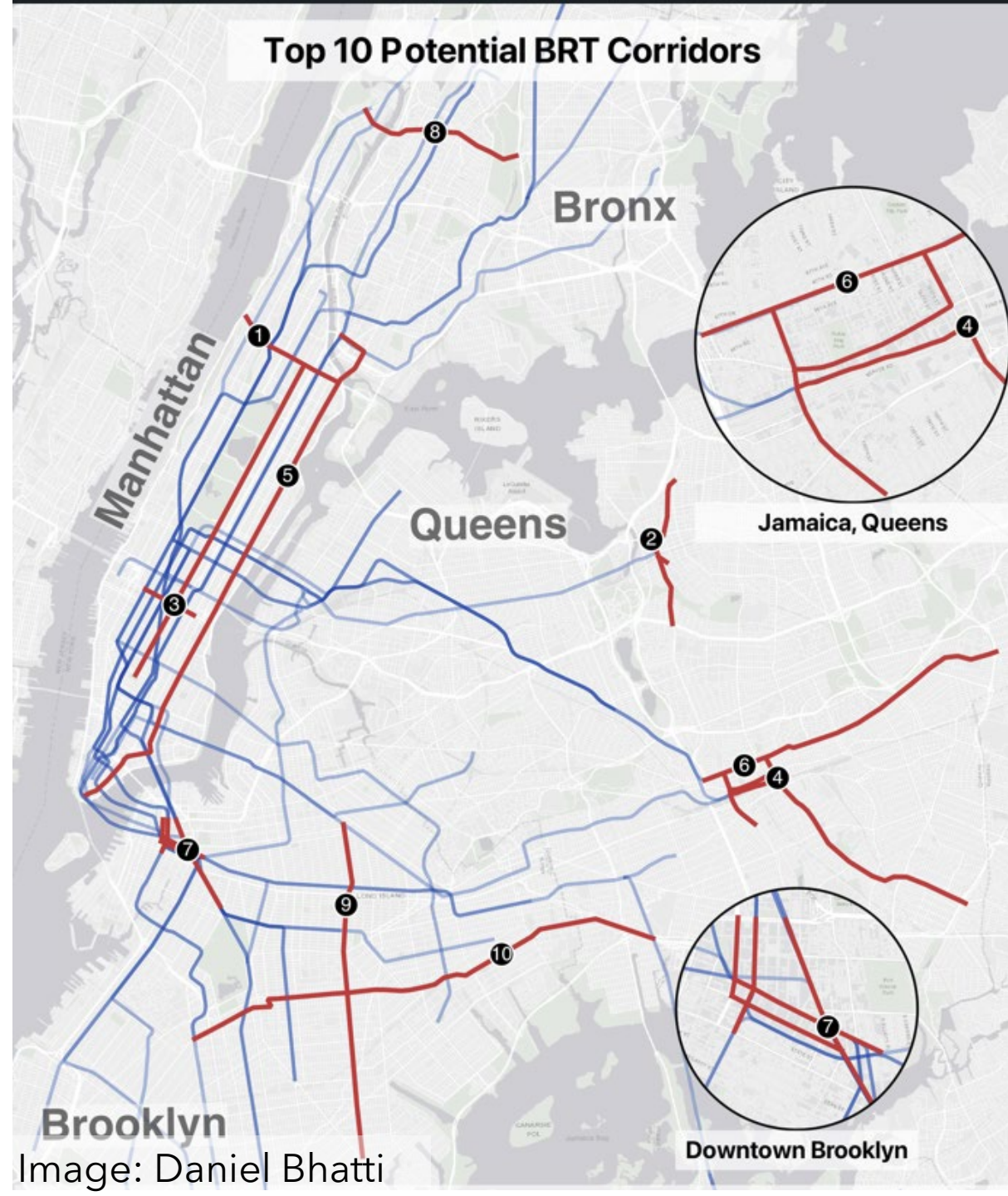
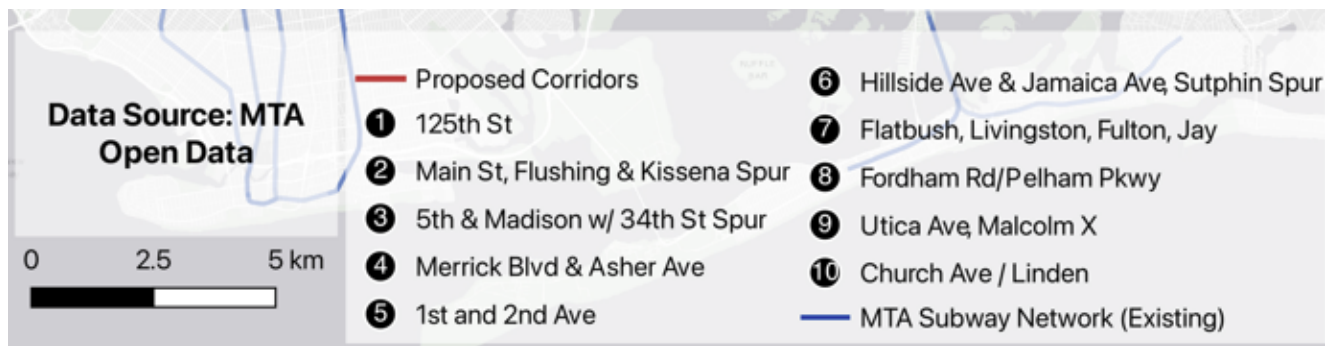
Possible Missing Links

The following inter-borough BRT links don't currently exist and are worth considering:

- **Flatbush BRT** over **Manhattan Br**, across **Canal Street**
- **1st & 2nd Ave**, across the **Willis/3rd Ave Bridge**, joining with **Webster/Melrose** in the Bronx where the Bx41-SBS runs, or the Grand Concourse.
- **Utica Ave:**
 - Over the **Williamsburg Br**, across **Houston St**; or
 - Along the **Brooklyn Waterfront**
- **Northern Blvd**, over the **Queensboro Bridge** to **57th St**
- **Bedford/Nostrand**, extended to the **Williamsburg Waterfront**



Top 10 Potential BRT Corridors



Potential BRT Corridors: 11-19



Data Source: MTA
Open Data

- | | |
|-----------------------------|---------------------------------|
| — Proposed Corridors | 16 Northern Boulevard |
| 11 Flatlands, Kings Highway | 17 14th St |
| 12 Grand Concourse | 18 9th & 10th |
| 13 3rd & Lex | 19 Queens Blvd |
| 14 86th St, Manhattan | — MTA Subway Network (Existing) |
| 15 Nostrand/Bedford | |

Next Potential BRT Corridors

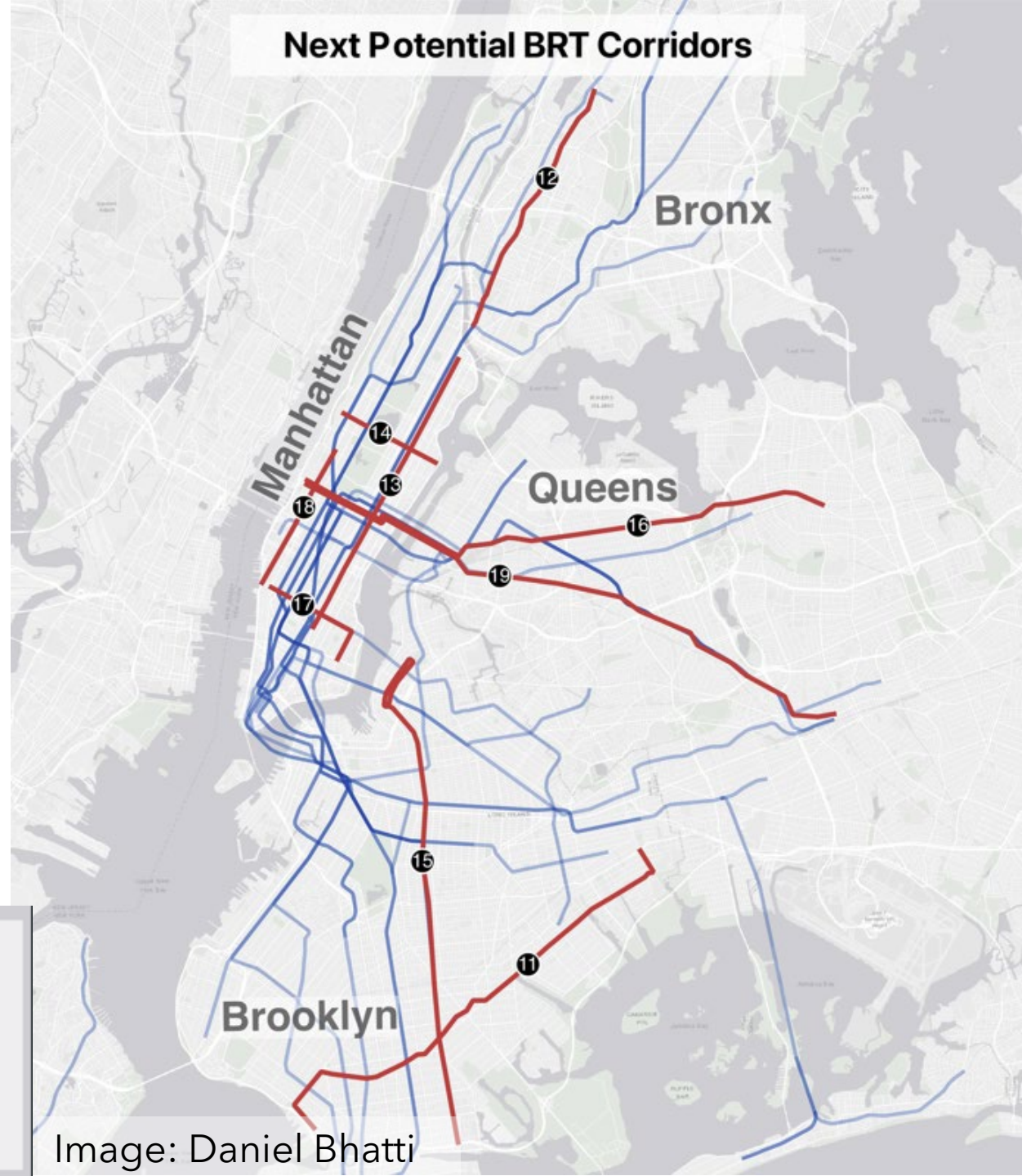
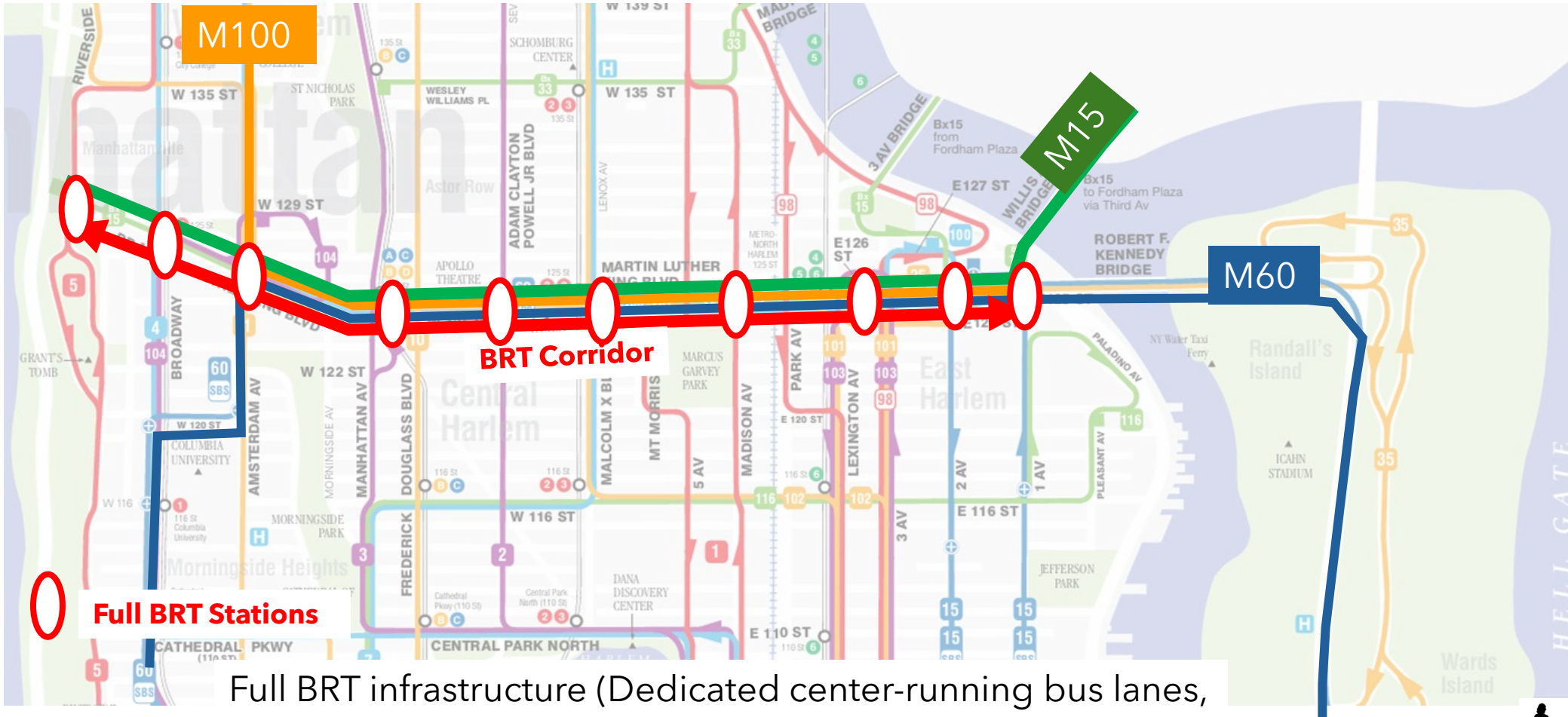


Image: Daniel Bhatti

BRT Corridor 1: 125th St. St



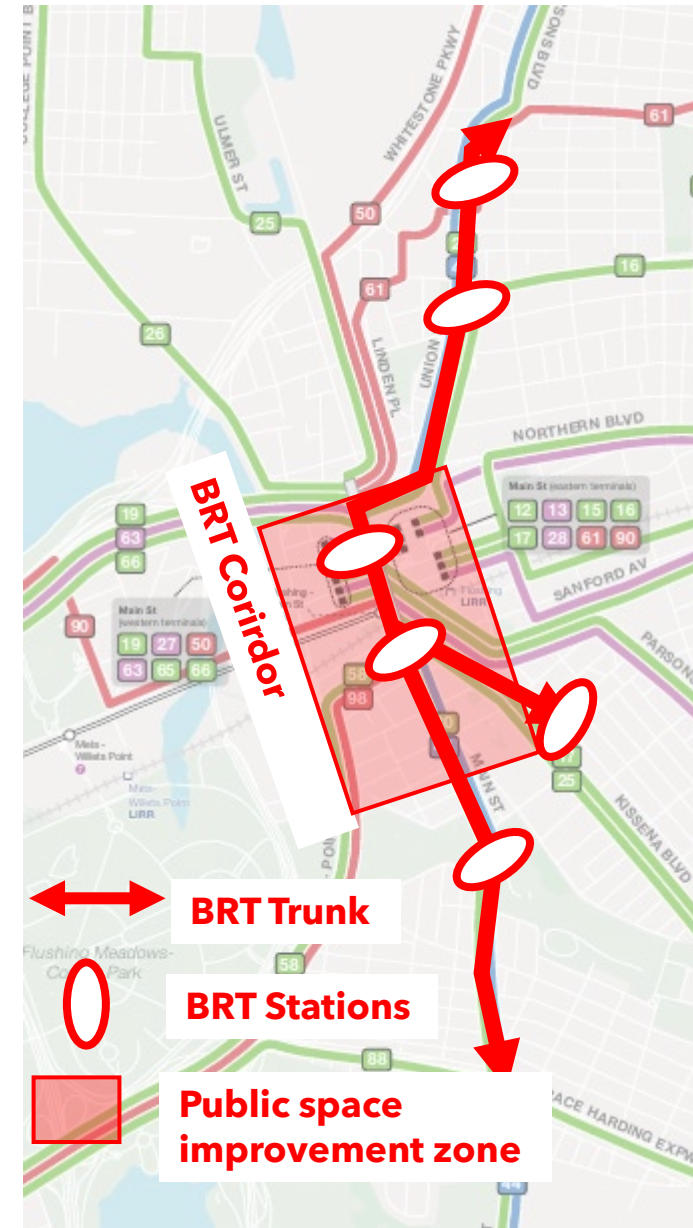
Full BRT infrastructure (Dedicated center-running bus lanes, enclosed pre-paid boarding stations) serving multiple routes & completing the subway grid.

BRT Corridor 2

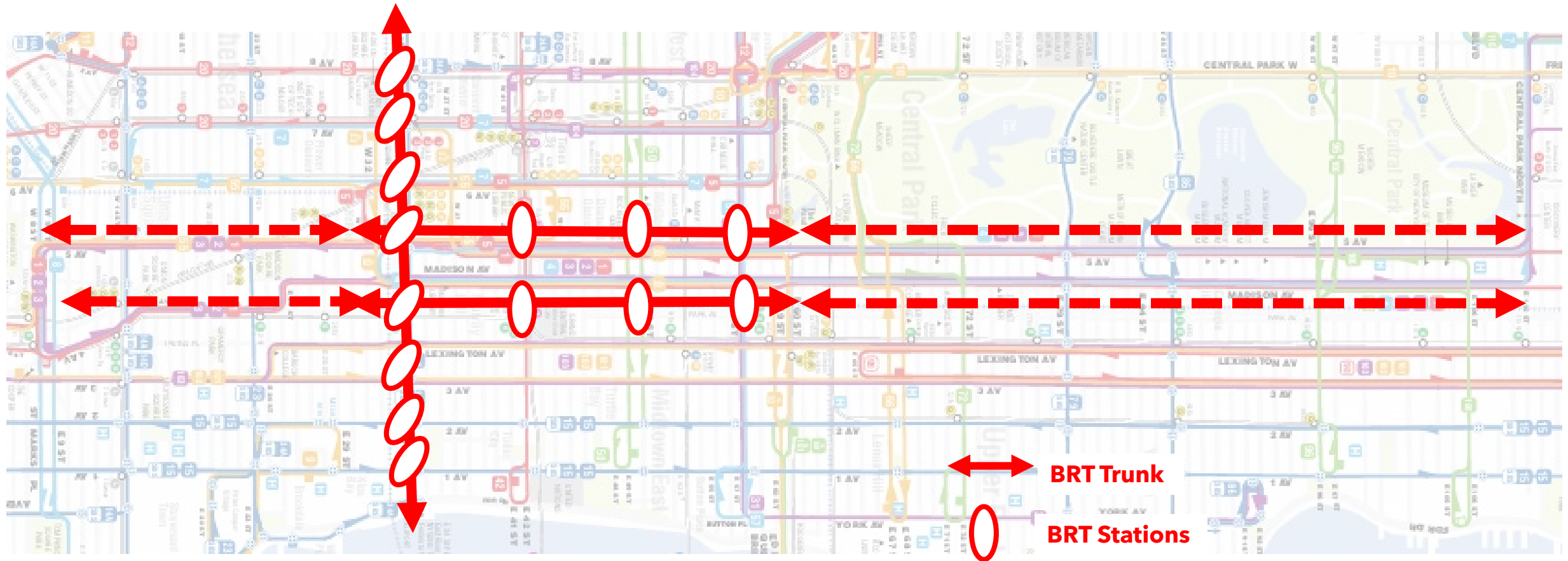
Main Street, Flushing

Phase 1 would cover the Q44 SBS routes through Flushing but all other route would be allowed to use the BRT infrastructure.

Possible Extension to Jamaica and Bronx in the future.






BRT Corridor 3: 5th & Madison w/ 34th St. Spur

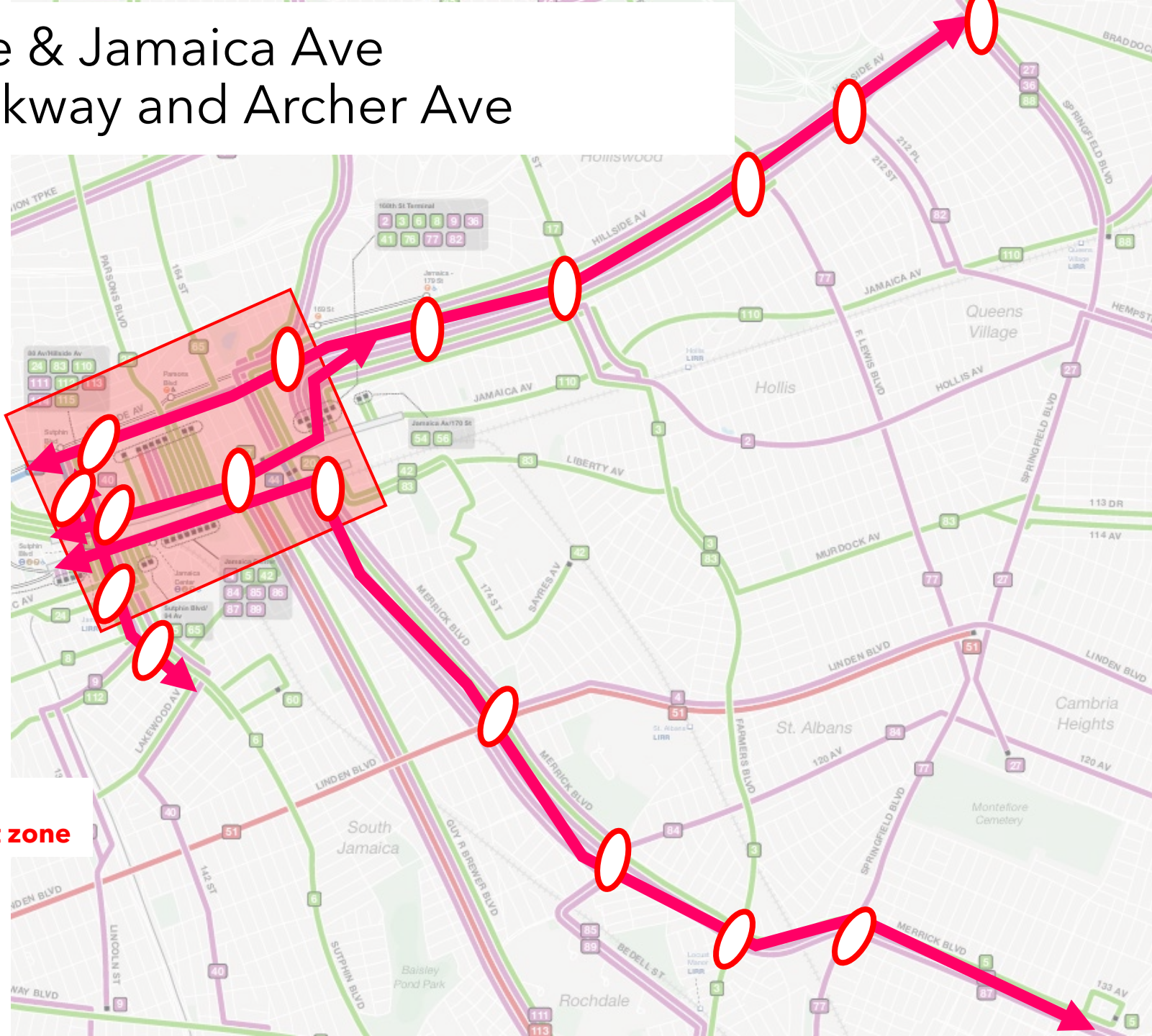


Critical point:
Current proposals for a 5th Avenue Busway/Pedestrian
Zone needs to be designed for a very high volume of buses

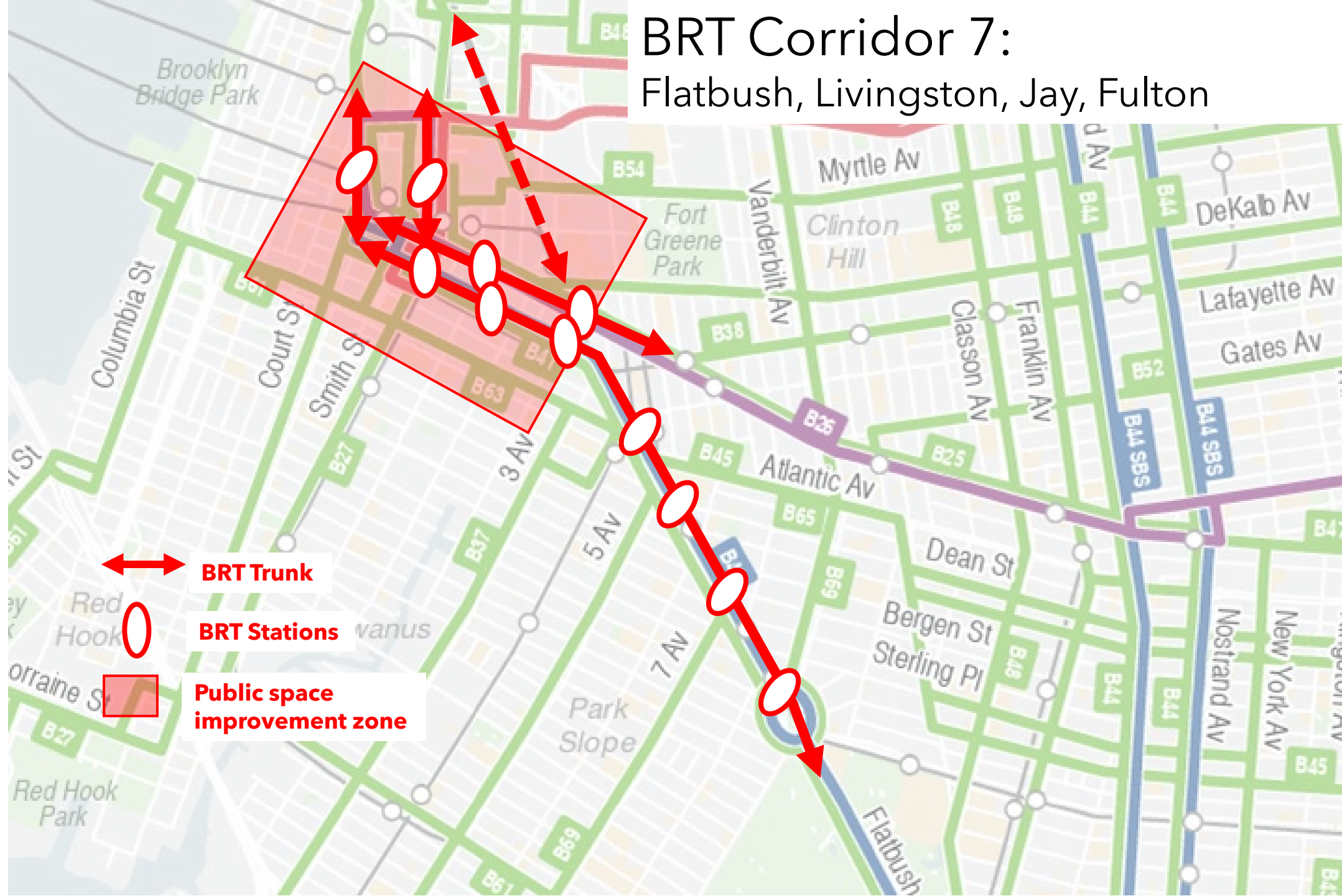
BRT Corridor 4: Hillside Ave & Jamaica Ave

BRT Corridor 6: Merrick Parkway and Archer Ave

-  BRT Trunk
-  BRT Stations
-  Public space improvement zone



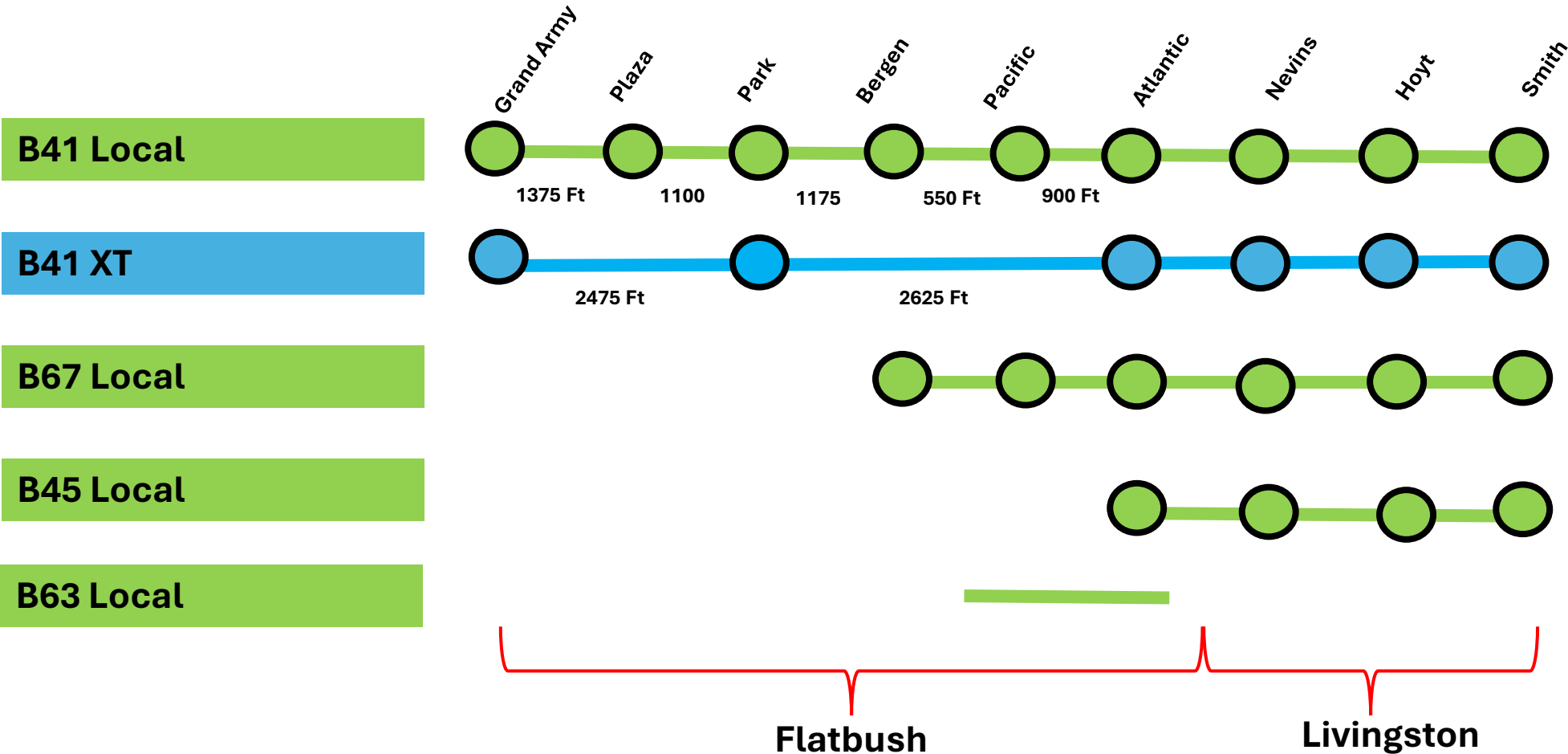
BRT Corridor 7: Flatbush, Livingston, Jay, Fulton



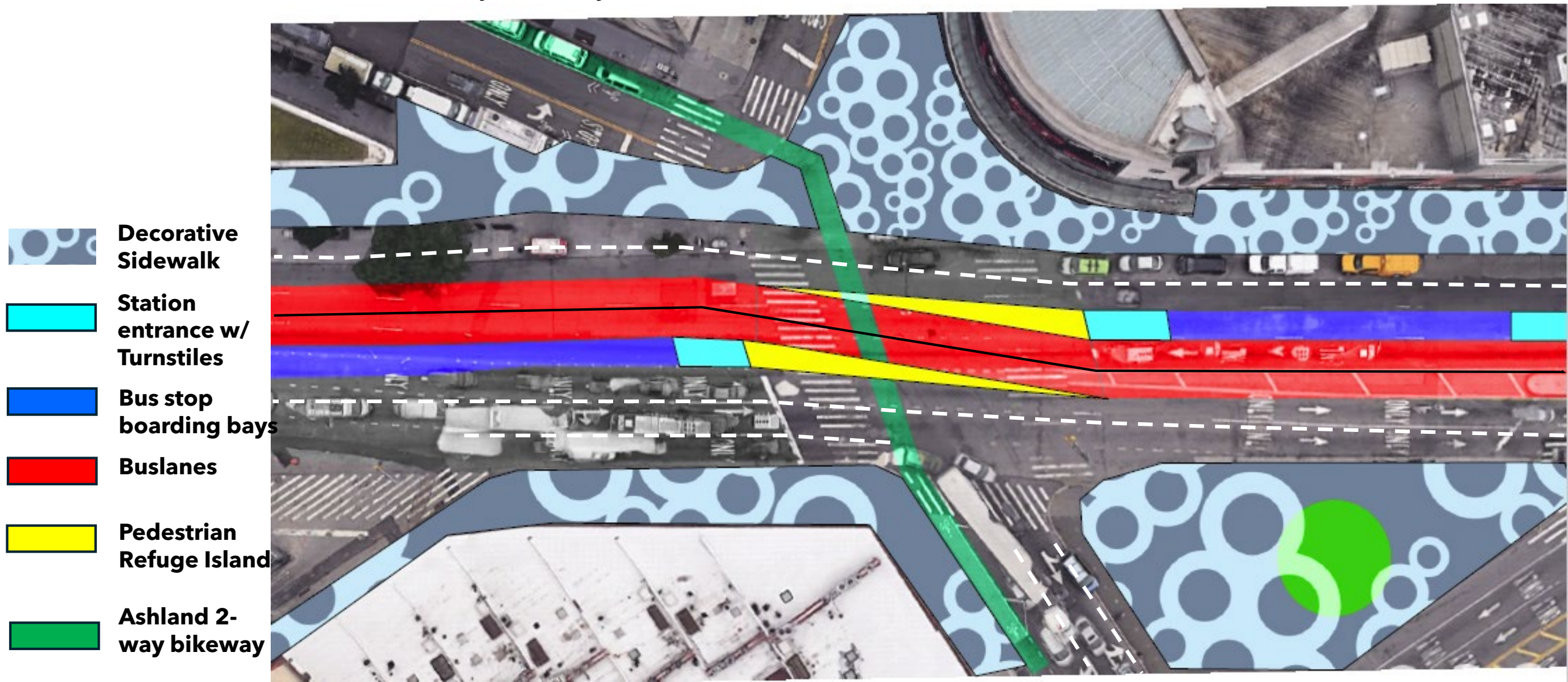
BRT Corridor 7: Flatbush, Livingston, Jay, Fulton

Current Service Plan as per the Brooklyn Network Redesign

The local stops do not work well with BRT in this case. We suggest removing two of the stops (Pacific definitely, Grand Army maybe, consolidate park and Bergen)



The public space around the BRT corridor should be simultaneously improved. Why not turn the skylight over the Atlantic station (green circle) into a proper skylight with some architectural merit? The extension of the Ashland 2-way bikeway should be shown.





People-Oriented Cities is an advocacy and technical assistance organization that works to enhance sustainability, livability, and equity in cities, with a focus on transportation, strategic land use, and economic development.

Peopleoriented.org