



# Fast Forward: Bronx Bus Network Redesign Final Plan

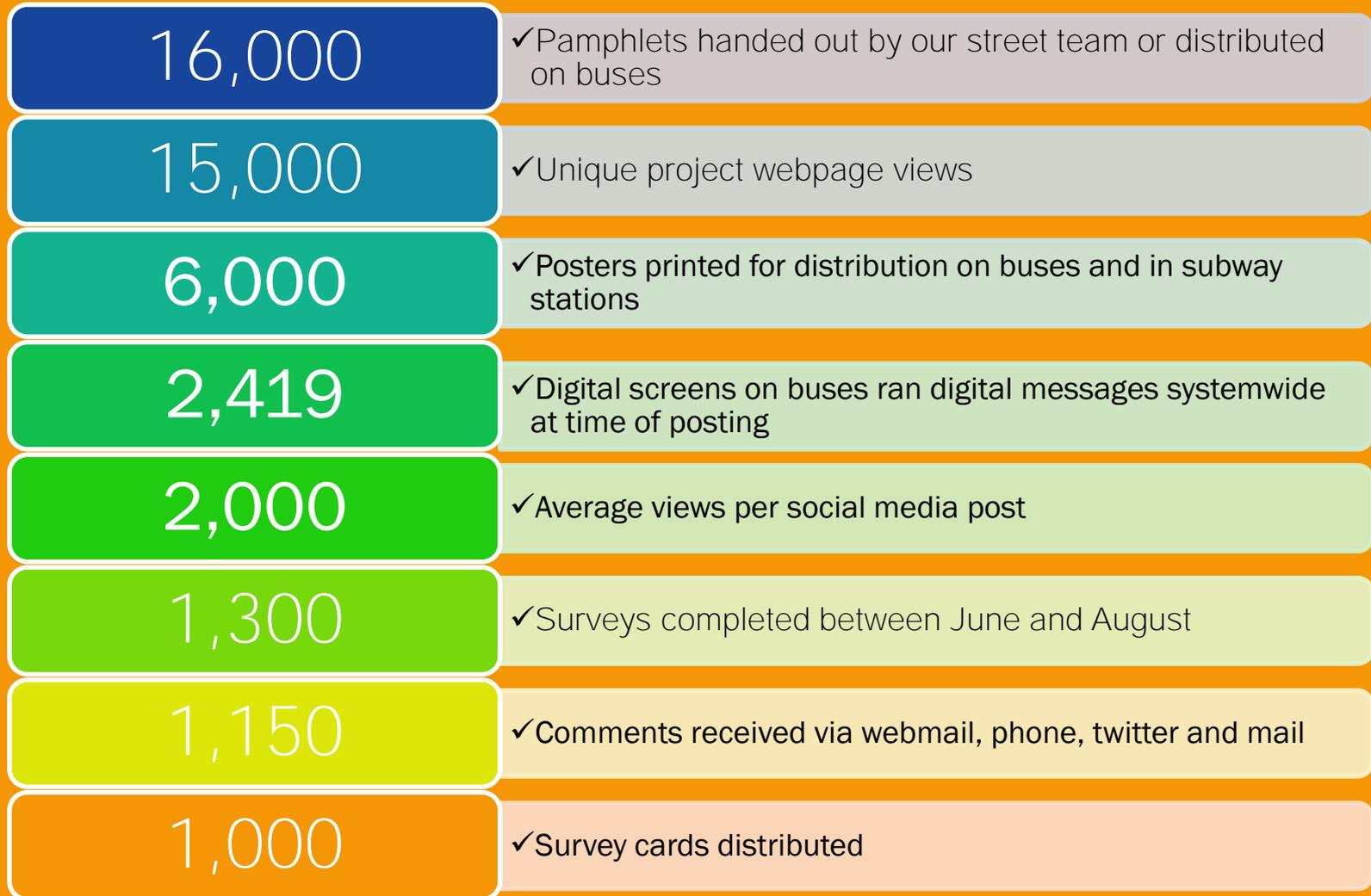
December 11, 2019

# Post-Draft Plan Update

# Outreach Summary

200	✓Subway stations with digital screens ran digital messages systemwide at time of posting
50	✓Social media posts promoting the Bronx Bus Network Redesign
13	✓On-street engagement events in the Bronx and Upper Manhattan in July and August
11	✓Community Board presentations in the Bronx and Manhattan
9	✓Open Houses in the Bronx (8) and Upper Manhattan (1)
6	✓Workshops to introduce the project
3	✓Videos of our presentations to the Joint Borough Service Cabinet/Borough Board available on Bronxnet.org
2	✓Fast Forward Community Conversations
1	✓Update to the public timeline with explanation to support transparency
✓	✓Met with all stakeholders who requested a meeting or phone call

# Outreach Summary



# Redesign Strategies

## More Direct Routings

- Streamlined complex, circuitous routings to make them more simple, straight, and direct
- Bus routes with straight and direct routing tend to be more reliable

## Bus Stop Balancing

- Every bus stop is a trade-off between convenience of access to the bus and the speed and reliability of service
- NYC buses have the shortest average stop distance (805 ft.) of any major city
- Improved stop spacing in the Bronx to get customers where they are going faster

## Improved Connectivity

- Improved east-west bus connections which are crucial for intra-borough travel
- Improved connections to the subway lines
- Improved crosstown access to Manhattan

## Increased Frequency

- Improved frequency for 11 routes on 9 key corridors to create an all-day frequent network

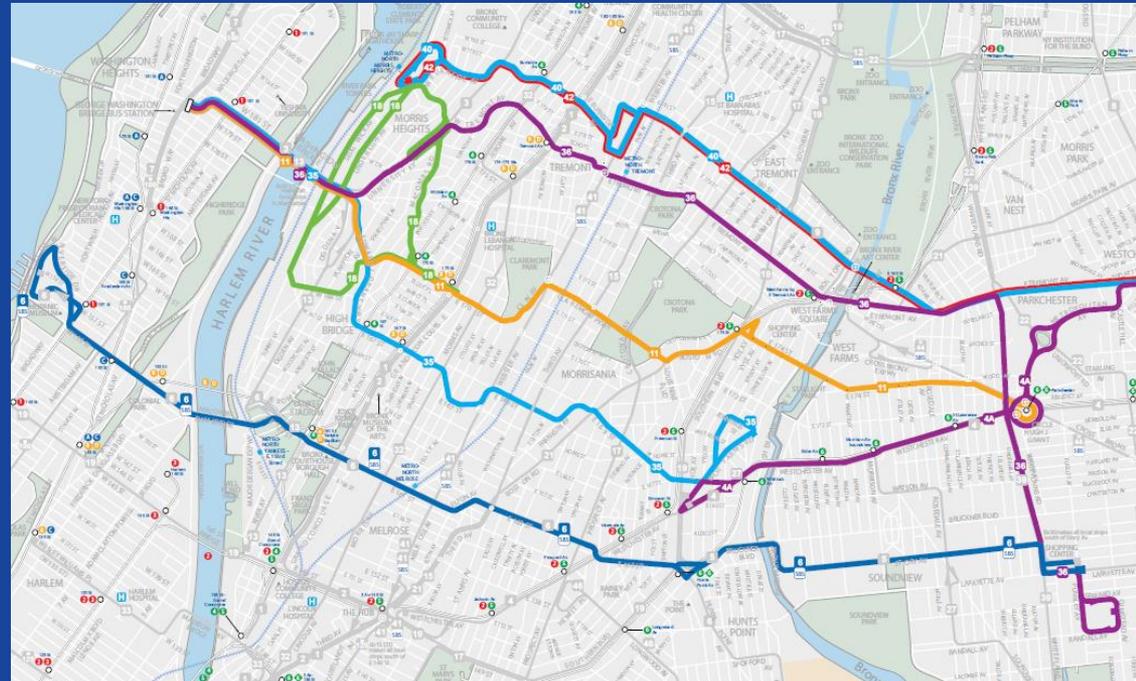
## More Bus Priority

- NYCDOT has identified 10 key transit priority corridors in the Bronx
- Bus lanes and other priority treatments would provide the biggest benefit to customers
- NYCDOT, with MTA, continues to expand Transit Signal Priority (TSP) in the Bronx

# Proposed Final Plan

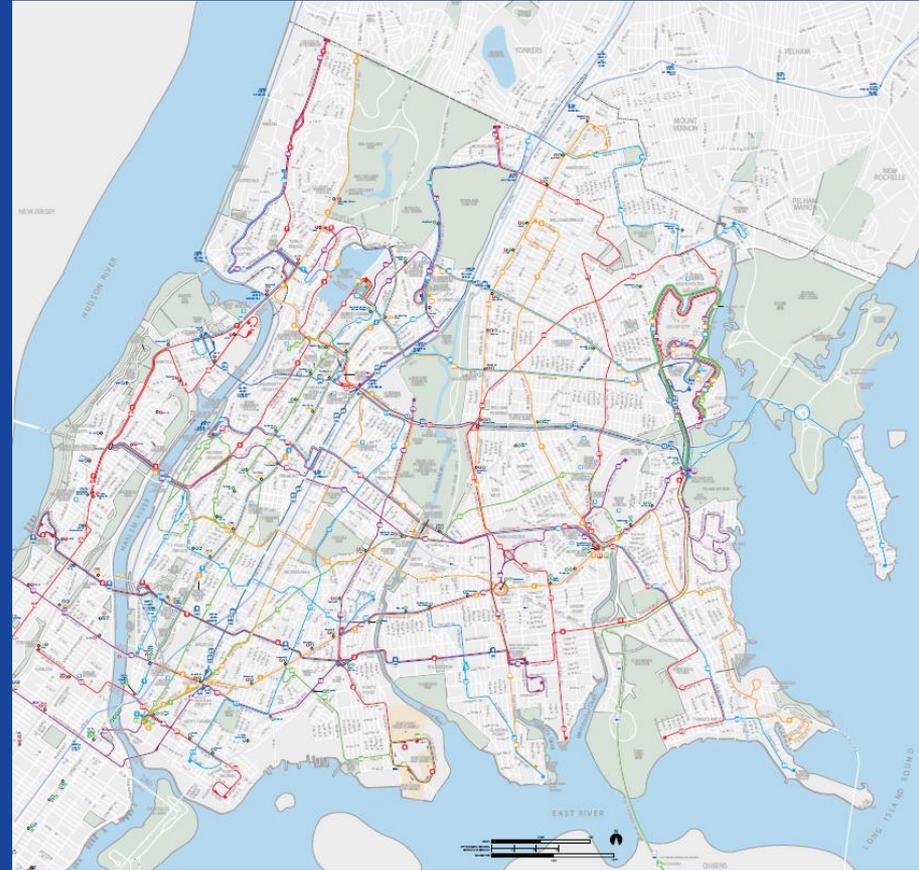
# More Direct Routings

- 18 total route changes are proposed with 2 new routes
  - Bx4A
  - Bx6 SBS
  - Bx11
  - Bx15
  - Bx18
  - Bx24
  - Bx25 (new)
  - Bx28
  - Bx29
  - Bx30
  - Bx34
  - Bx35
  - Bx36
  - Bx40
  - Bx42
  - Q50 Ltd
  - M100
  - M125 (new)

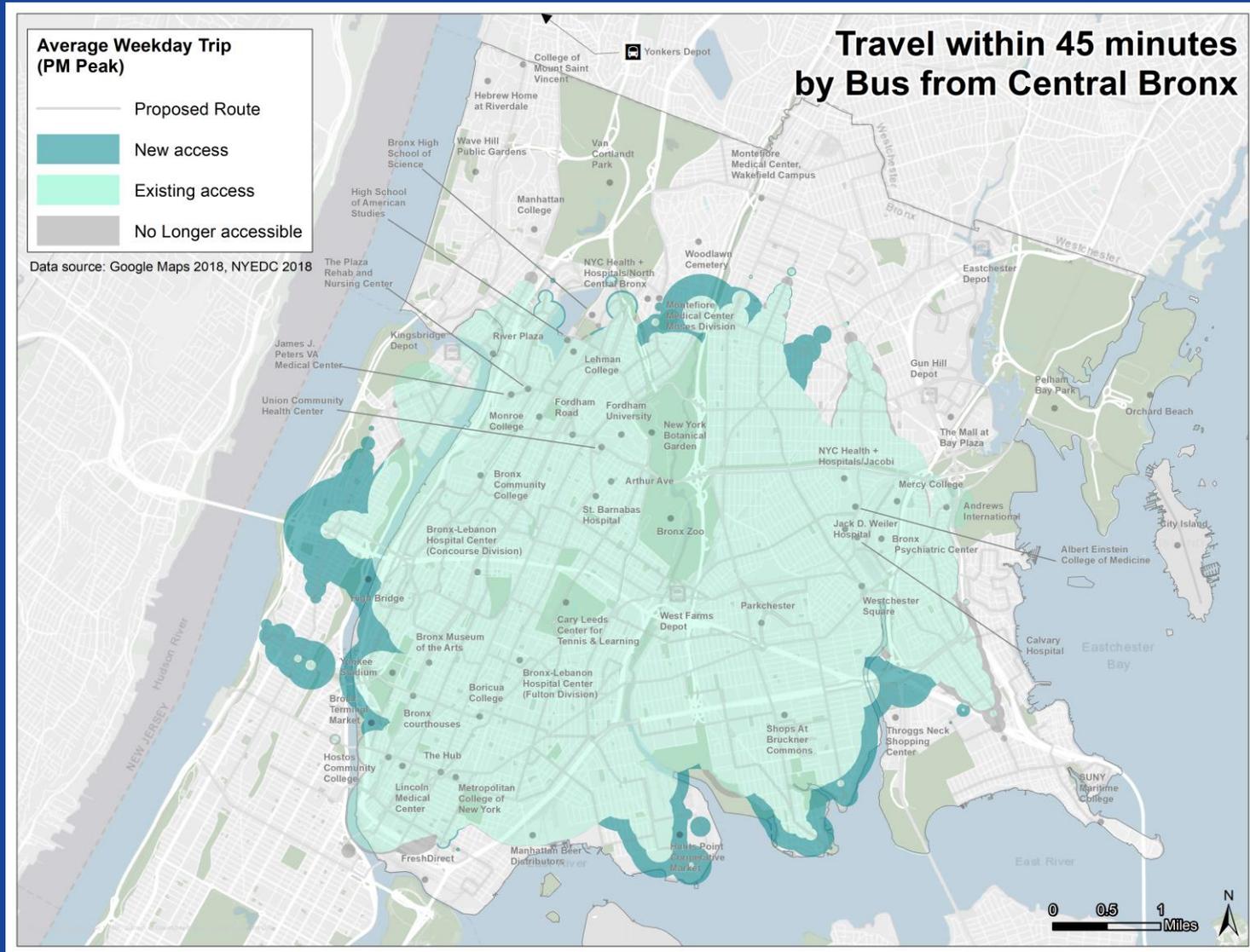


# Improved Connectivity

- Ease of connections at key transfer locations
- Route alignment changes bring new access for customers
  - Bx6 SBS extension to Soundview
  - Bx11 extension to Parkchester
  - Bx18 extension in High Bridge
  - Bx25 new service from Northern Co-op City to Bedford Park
  - Bx30 reroute to Boston Rd
  - Bx34 reroute to terminate at Fordham Plaza
  - Bx35 extension to West Farms
  - Bx40/42 new connection to E 180 St **2** **5** station

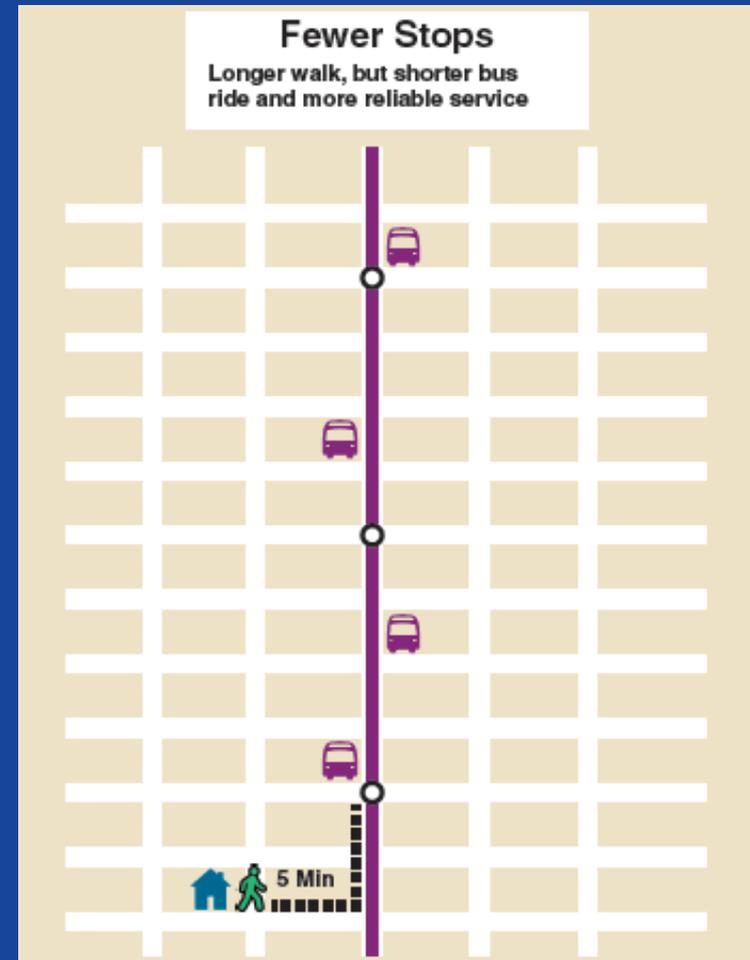


# Improved Connectivity



# Bus Stop Balancing

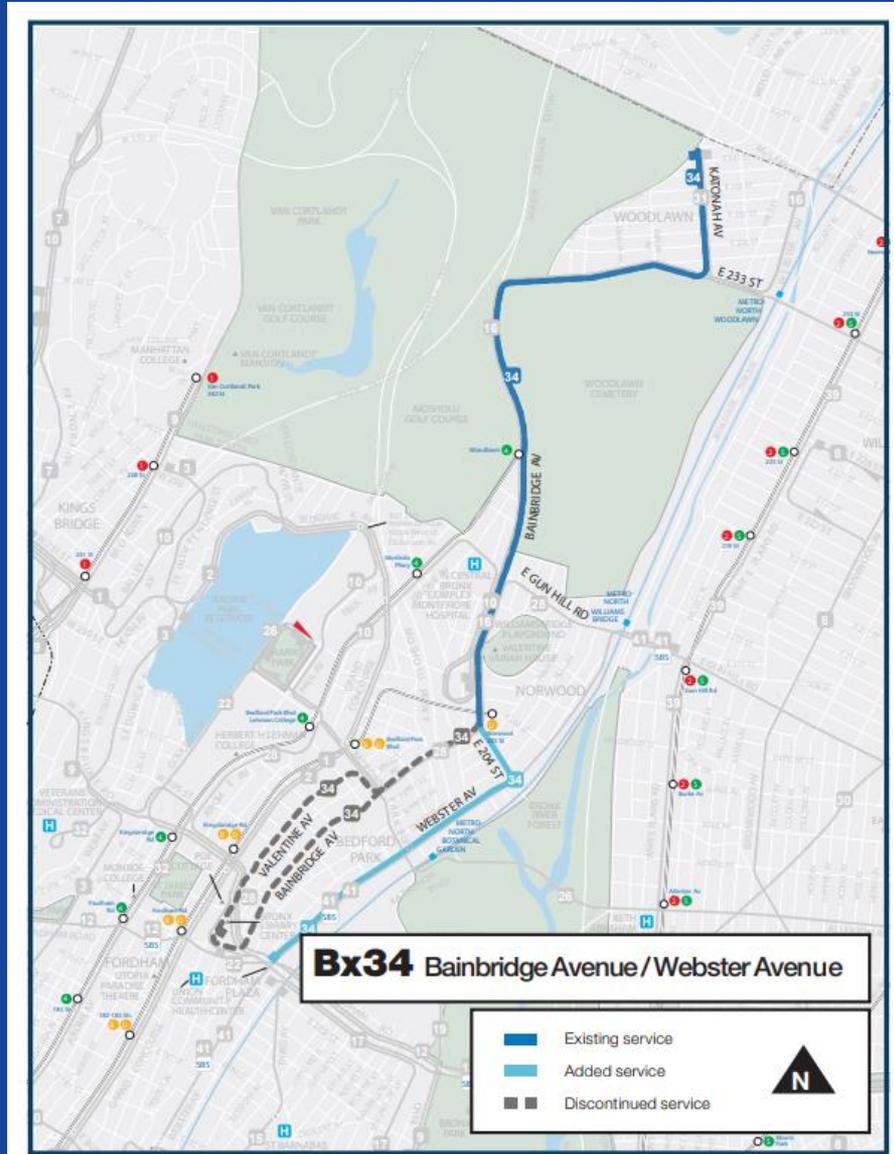
- **400** Local/Limited stops are proposed for removal
- This would improve average stop spacing from every 882 feet to every **1,100** feet
- For every bus stop removed 20 seconds is shaved off a customer's commute
- Those routes with fewer stop removals are due to severe drawbacks (such as elevation) and community impacts if spacing was more aggressive
- Maintained stops that provided connection to subway stations and other bus routes
- Maintained stops with heavy ridership, specifically those used by populations for whom a removal would present a significant burden (e.g. retirement communities, hospitals, schools)



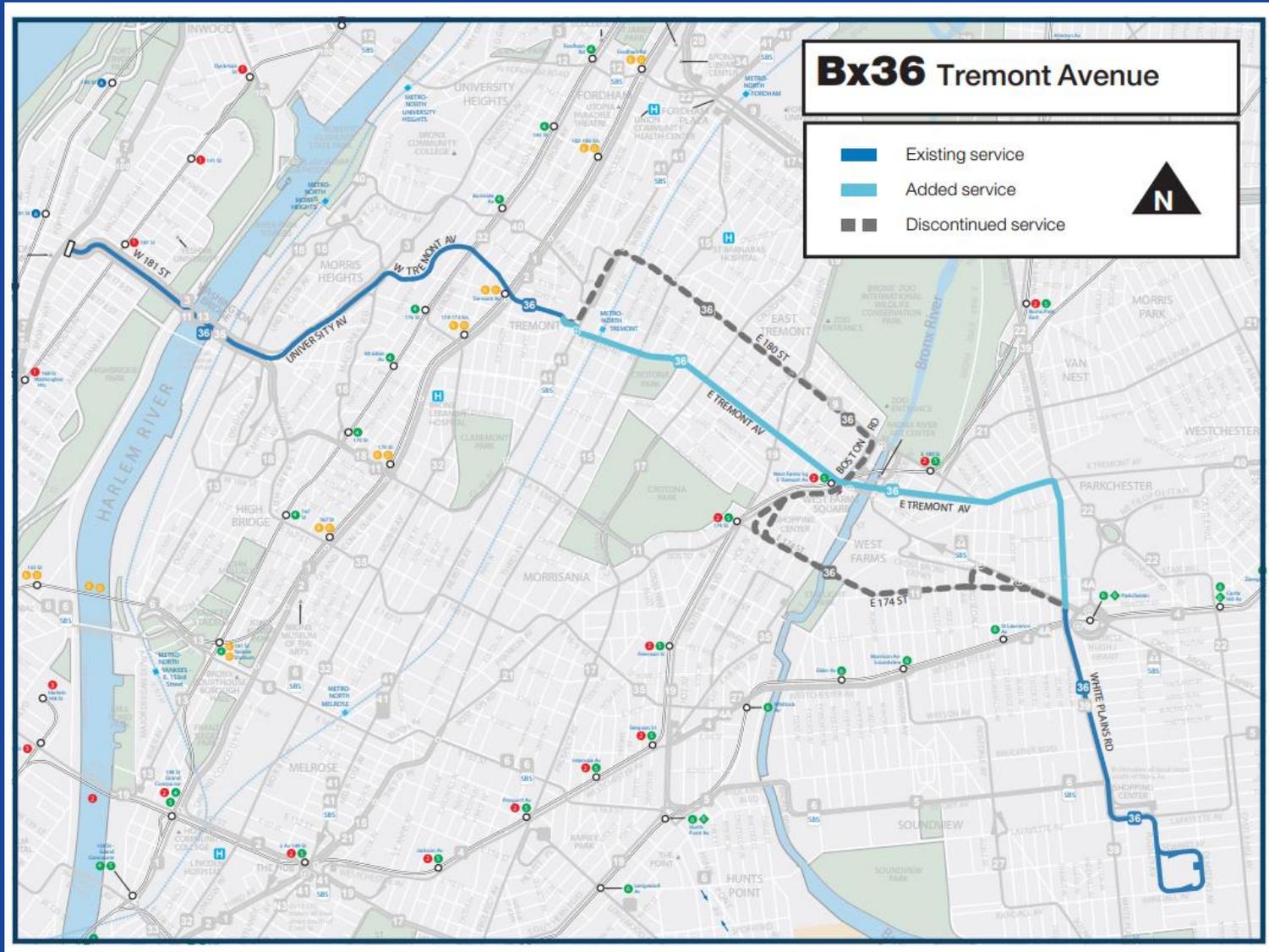




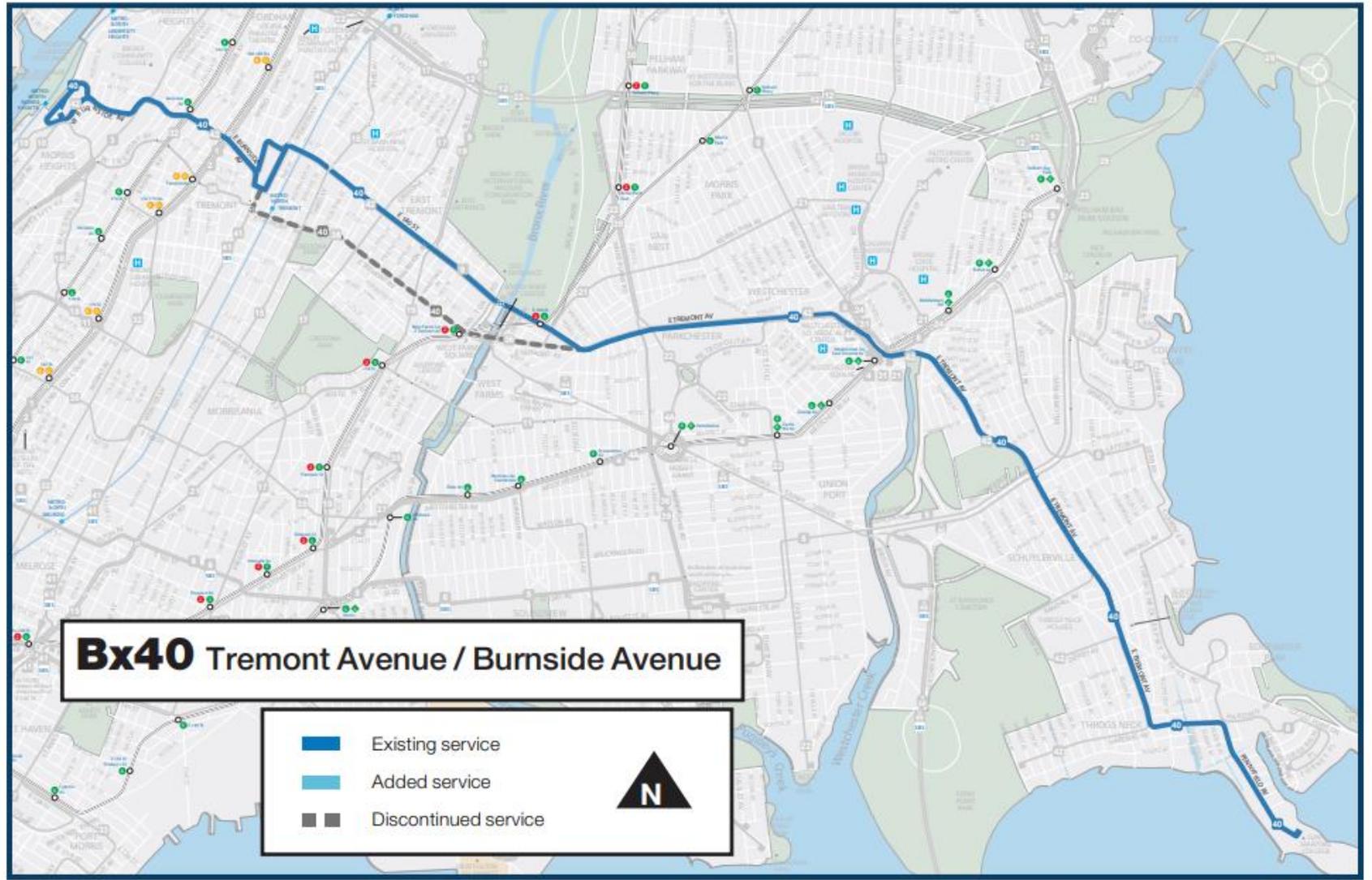
# Bx34



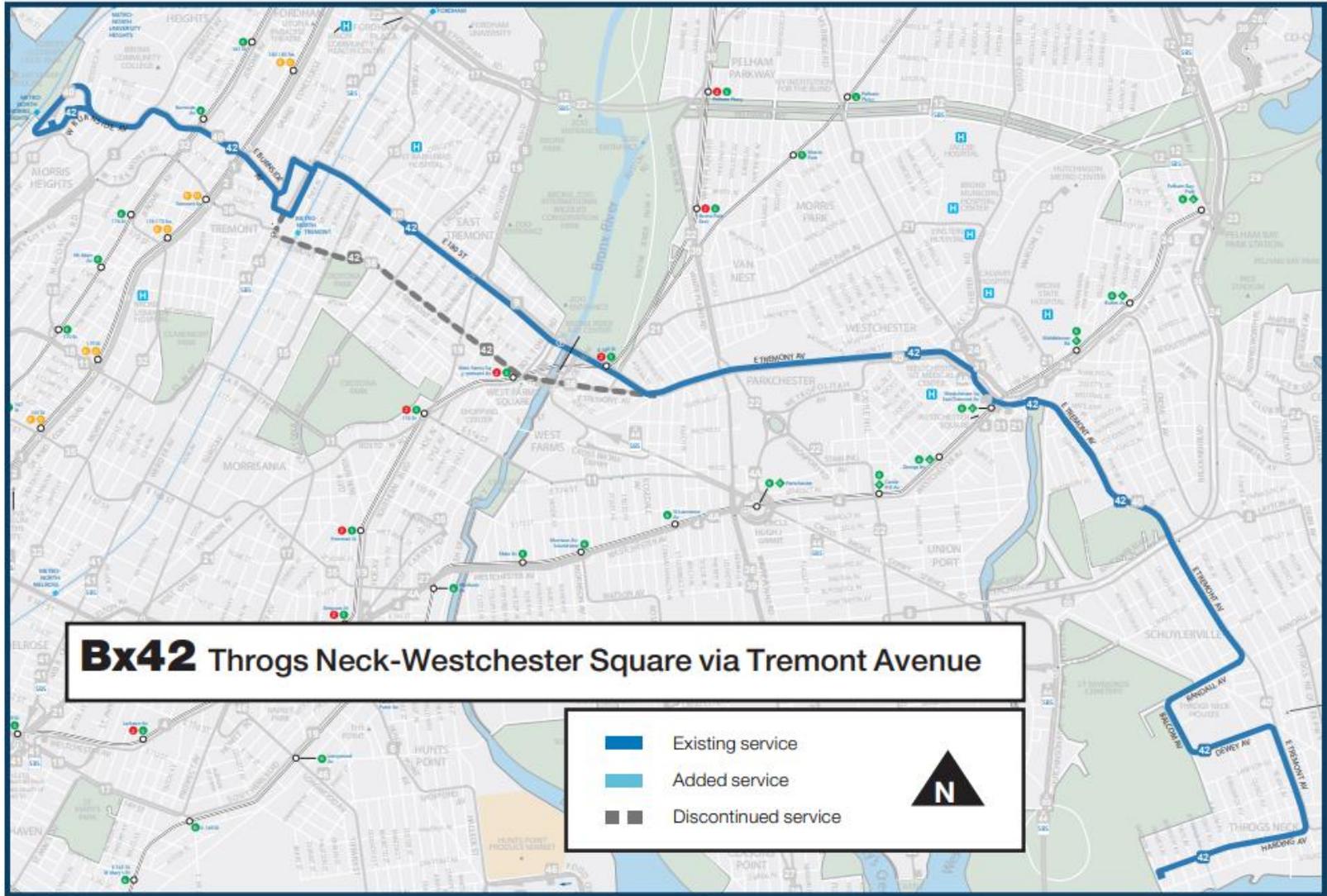
# Bx36



# Bx40



# Bx42



# Increased Frequency

Route	Frequency (min.)	Proposed (min.)	Proposed Frequency - Weekday (min.)					Proposed Service Span - Weekday	
			AM Peak	Midday	PM Peak	Evening	Overnight	SB/WB	NB/EB
<b>Bx1</b>	15-or-better	15-or-better	-	-	-	12	-	4:15 AM - 5:45 am 6:45 pm - 12:45 am	5:15 am - 6:45 am 8:00 pm - 1:45 am
<b>Bx1 LTD</b>			8	10	8	-	-	5:45 am - 6:30 pm	6:45 am - 8:00 pm
<b>Bx2</b>	15-or-better	15-or-better	8	9	8	15	-	5:00 am - 11:30 pm	6:00 am - 1:00 am
<b>Bx1/2 Combined</b>	8-or-better	8-or-better	4	5	4	7	-		
<b>Bx3</b>	8-or-better	8-or-better	6	7	7	8	-	5:15 am - 12:45 am	5:30 am - 1:30 am
<b>Bx4</b>	30-or-better	15-or-better	10	15	12	15	-	5:00 am - 12:45 am	5:30 am - 1:30 am
<b>Bx4A</b>	30-or-better	15-or-better	12	15	12	15	-	5:30 am - 12:00 am	5:30 am - 1:00 am
<b>Bx4/4A Combined</b>	15-or-better	8-or-better	6	8	6	8	-		
<b>Bx5</b>	15-or-better	15-or-better	5	12	8	9	-	5:00 am - 12:45 am	5:15 am - 1:15 am
<b>Bx6</b>	15-or-better	8-or-better	6	8	6	8	60	24 hours	24 hours
<b>Bx6 SBS</b>	15-or-better	15-or-better	8	12	10	10	-	5:30 am - 9:15 pm	5:30 am - 9:45 pm
<b>Bx7</b>	15-or-better	15-or-better	7	11	7	7	-	4:45 am - 1:30 am	4:45 am - 12:45 am
<b>Bx8</b>	15-or-better	15-or-better	9	13	10	12	-	6:00 am - 10:30 pm	5:30 am - 9:30 pm
<b>Bx9</b>	8-or-better	8-or-better	5	8	5	8	45	24 hours	24 hours
<b>Bx10</b>	15-or-better	15-or-better	6	10	8	9	40	24 hours	24 hours
<b>Bx11</b>	15-or-better	8-or-better	5	8	6	8	40	24 hours	24 hours
<b>Bx12</b>	15-or-better	15-or-better	10	12	9	13	40	24 hours	24 hours
<b>Bx12 SBS</b>	8-or-better	8-or-better	4	5	5	6	-	5:15 am - 10:00 pm	5:00 am - 11:00 pm
<b>Bx13</b>	15-or-better	8-or-better	4	8	4	6	-	5:30 am - 1:00 am	5:00 am - 12:30 am
<b>Bx15</b>	15-or-better	15-or-better	8	12	9	10	30	24 hours	24 hours
<b>Bx15 LTD</b>	15-or-better	15-or-better	7	11	8	12	-	5:00 am - 6:45 pm	5:30 am - 7:45 pm
<b>Bx15 Combined</b>	8-or-better	8 or better	4	6	4	6	30		
<b>Bx16</b>	30-or-better	30-or-better	7	20	10	17	-	5:00 am - 1:15 am	5:30 am - 12:30 am
<b>Bx17</b>	15-or-better	15-or-better	6	12	9	12	-	4:30 am - 12:45 am	4:15 am - 12:00 am
<b>Bx18</b>	30 or better	30-or-better	10	20	10	17	-	5:00 am - 1:00 am	5:00 am - 12:45 am
<b>Bx19</b>	8-or-better	8-or-better	7	8	7	8	45	24 hours	24 hours
<b>Bx20</b>	Peak Only	Peak Only	17	-	16	-	-	7:30 am - 9:00 am 3:45 pm - 8:00 pm	7:00 am - 8:30 am 3:30 pm - 7:30 pm
<b>Bx21</b>	15 or better	15-or-better	7	10	8	10	45	24 hours	24 hours
<b>Bx22</b>	15-or-better	15-or-better	7	12	8	10	60	24 hours	24 hours
<b>Bx23</b>	30-or-better	30-or-better	6	20	6	15	-	5:30 am - 1:00 am	4:45 am - 11:45 pm
<b>Bx24</b>	30-or-better	30-or-better	30	30	30	30	60	24 hours	24 hours
<b>Bx25</b>	-	30-or-better	17	24	18	24	-	5:45 am - 10:45 pm	6:30 am - 11:30 pm

No change in frequency
  Increase in frequency
  Decrease in frequency

# Increased Frequency

Route	Frequency (min.)	Proposed (min.)	Proposed Frequency - Weekday (min.)					Proposed Service Span - Weekday	
			AM Peak	Midday	PM Peak	Evening	Overnight	SB/WB	NB/EB
<b>Bx26</b>	15-or-better	<b>30-or-better</b>	<b>17</b>	<b>24</b>	<b>18</b>	<b>24</b>	-	5:30 am - 11:00 pm	6:15 am - 11:45 pm
<b>Bx25/26 Combined</b>	-	<b>15-or-better</b>	9	12	9	12	-		
<b>Bx27</b>	15-or-better	15-or-better	5	12	6	9	40	24 hours	24 hours
<b>Bx28</b>	15-or-better	15-or-better	<b>10</b>	15	<b>11</b>	<b>13</b>	40	24 hours	24 Hours
<b>Bx38</b>	15-or-better	15-or-better	<b>10</b>	15	<b>11</b>	<b>13</b>	-	5:45 am - 9:45 pm	6:45 am - 10:00 pm
<b>Bx28/38 Combined</b>	8-or-better	8-or-better	<b>5</b>	8	6	<b>7</b>	40		
<b>Bx29</b>	30-or-better	30-or-better	15	30	15	20	<b>40</b>	<b>24 hours</b>	<b>24 hours</b>
<b>Bx30</b>	15-or-better	15-or-better	8	13	9	12	-	5:15 am - 11:30 pm	6:00 am - 12:00 am
<b>Bx31</b>	15-or-better	15-or-better	8	12	9	12	-	5:15 am - 1:15 am	4:45 am - 12:45 am
<b>Bx32</b>	30-or-better	30-or-better	9	13	11	20	-	6:00 am - 12:00 am	6:15 am - 11:30 pm
<b>Bx33</b>	30-or-better	30-or-better	15	24	16	30	-	5:00 am - 12:30 am	4:30 am - 12:00 am
<b>Bx34</b>	30-or-better	30-or-better	13	20	16	20	-	5:00 am - 1:00 am	5:00 am - 12:30 am
<b>Bx35</b>	15-or-better	15-or-better	6	10	8	10	60	24 hours	24 hours
<b>Bx36</b>	15-or-better	15-or-better	9	9	8	10	50	24 hours	24 hours
<b>Bx36 LTD</b>	15-or-better	15-or-better	10	-	11	-	-	"6:45 am - 9:00 am 3:00 pm - 6:15 pm"	"6:45 am - 10:00 am 2:45 pm - 7:30 pm"
<b>Bx36 Combined</b>	15-or-better	15-or-better	5	9	5	10	50		
<b>Bx39</b>	15-or-better	15-or-better	6	12	10	13	60	24 hours (overnight north of Gun Hill Rd)	24 hours (overnight north of Gun Hill Rd)
<b>Bx40</b>	30-or-better	30-or-better	15	17	15	17	60	24 hours	24 hours
<b>Bx42</b>	30-or-better	30-or-better	15	17	15	15	-	4:30 am - 1:00 am	4:00 am - 12:45 am
<b>Bx40/42 Combined</b>	15-or-better	15-or-better	8	9	8	8	60		
<b>Bx41</b>	15-or-better	15-or-better	12	12	11	11	60	24 hours	24 hours
<b>Bx41 SBS</b>	15-or-better	<b>8-or-better</b>	8	<b>8</b>	8	<b>8</b>	-	5:30 am - 9:00 pm	6:00 am - 9:45 pm
<b>Bx46</b>	30-or-better	30-or-better	30	30	30	30	-	6:00 am - 12:00 am	5:30 am - 11:30 pm
<b>Q50 LTD</b>	30-or-better	30-or-better	15	30	15	24	-	3:30 am - 12:00 am	4:25 am - 1:15 am
<b>M100</b>	15-or-better	15-or-better	8	8	9	12	-	4:15 am - 12:15 am	5:15 am - 1:15 am
<b>M125</b>	-	8-or-better	8	8	8	8	60	24 hours	24 hours

No change in frequency
  Increase in frequency
  Decrease in frequency

# Express Bus Schedule Changes

- All service reductions are guideline-based
- Numerous routes showed extremely low ridership, especially in the reverse peak direction
- On weekends, most buses carry fewer than 10 passengers per trip across a 14-16 hour service span
- We also reduced span in the reverse-peak direction where ridership was extremely low
- We reinvested much of the savings into insuring our scheduled running time more accurately matches road conditions, hence, improving overall reliability

Route	Proposed Frequency - Weekday (min.)					Proposed Service Span - Weekday	
	AM Peak	Midday	PM Peak	Evening	Overnight	SB/WB	NB/EB
<b>BxM1</b>	8	30	12	<b>30</b>	-	5:30 am - <b>4:45 pm</b>	6:45 am - 12:45 am
<b>BxM2</b>	15	<b>60</b>	15	30	-	6:00 am - <b>3:00 pm</b>	<b>12:00 pm</b> - 12:45 am
<b>BxM3</b>	20	60	20	<b>60</b>	-	5:30 am - <b>1:45 pm</b>	<b>3:00 pm</b> - 12:00 am
<b>BxM4</b>	30	-	30	-	-	<b>5:30 am - 7:30 am</b>	<b>4:30 pm - 6:30 pm</b>
<b>BxM5</b>	<b>30</b>	-	<b>30</b>	-	-	<b>5:30 am - 7:30 am</b>	<b>4:30 pm - 6:30 pm</b>
<b>BxM6</b>	<b>20</b>	-	15	60	-	<b>5:30 am - 8:45 am</b>	<b>3:15 pm</b> - 12:15 am
<b>BxM7</b>	10	<b>60</b>	<b>7</b>	10	-	4:45 am - <b>3:00 pm</b>	<b>12:00 pm</b> - 1:30 am
<b>BxM8</b>	<b>10</b>	<b>60</b>	<b>7</b>	<b>30</b>	-	5:30 am - <b>12:00 pm</b>	<b>1:00 pm - 12:15 am</b>
<b>BxM9</b>	6	<b>60</b>	<b>8</b>	<b>30</b>	-	4:45 am - <b>3:00 pm</b>	<b>1:00 pm - 12:15 am</b>
<b>BxM10</b>	10	<b>60</b>	10	<b>30</b>	-	5:30 am - <b>10:00 pm</b>	7:00 am - 12:15 am
<b>BxM11</b>	<b>10</b>	<b>60</b>	<b>15</b>	<b>20</b>	-	5:30 am - <b>1:00 pm</b>	<b>1:15 pm</b> - 12:15 am
<b>BxM18</b>	<b>20</b>	-	30	-	-	<b>5:45 am</b> - 7:45 am	4:15 pm - 7:15 pm

No change in frequency
  Increase in frequency
  Decrease in frequency

# Next Steps

# Outreach

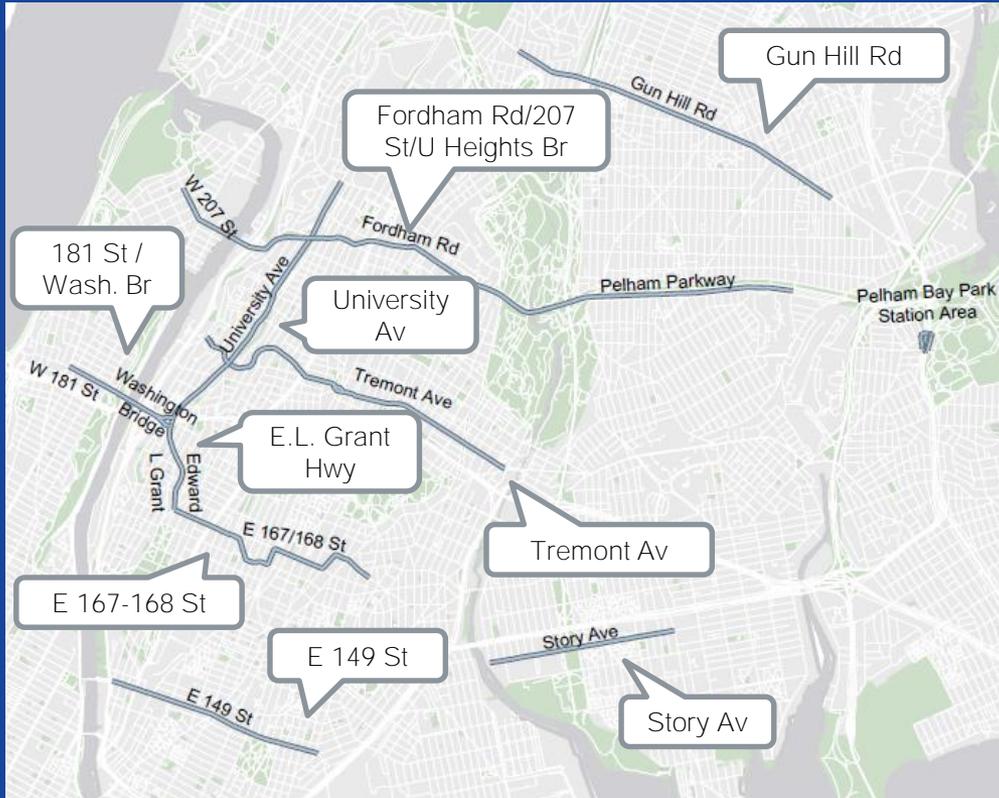
- We have been out and about in the Bronx and Manhattan to hear from customers & other stakeholders
- Detailed information for public input sessions is on the project website <https://new.mta.info/bronxbusredesign>
- We have heard from local and express bus costumers and are working to refine the Proposed Final Plan and publish an update in early 2020
- An alternative Trip Planner is available on the project website to allow customers to test out their travel options under the Proposed Final Plan:
- <https://otp-mta-proto.camsys-apps.com/>

# Implementation

- **Following outreach, we will begin to finalize the Bronx Bus Network Redesign Plan & prepare for implementation**
- **You will continue to hear from us as we grow closer to implementation**
- **Key Dates**
  - **Winter 2020**
    - **Public Hearing on Plan**
    - **MTA Board votes on Plan**
  - **Summer/Fall 2020**
    - **Implementation**

# NYC DOT Bus Priority Corridors

# Identified Bus Priority Corridors



- NYC DOT analyzed 46 major Bronx corridors to identify where bus lanes and other treatments would speed up buses and allow the MTA to operate more frequent service
- The analysis ranked potential bus-priority corridors using the following criteria:
  - Demand for bus service
  - Bus performance (speed and reliability)
  - Service levels proposed by MTA
  - Neighborhood demographics
  - Feasibility of implementation
- NYC DOT selected 10 of the highest ranking corridors and has begun studying bus priority projects to accompany the network redesign, with work beginning in 2020

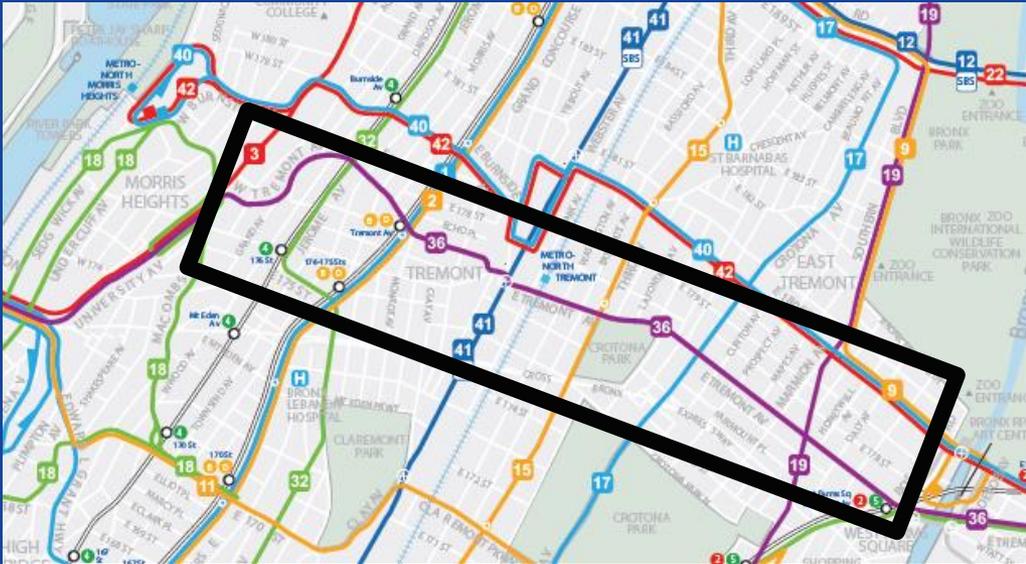
# NYCDOT Bus Priority Toolkit



- NYC DOT has developed and implemented bus priority treatments to provide faster, more reliable bus service:
  - New bus lanes
  - Upgraded bus lanes
  - Protected bus lanes
  - Bus boarders
  - Bus queue jump signals
  - Curb management
  - Pedestrian safety
  - Bus stop accessibility
  - Turn restrictions
- Other bus-supportive technologies: Transit Signal Priority (TSP) and Real-Time Passenger Information (RTPI)
- Better Buses Action Plan sets annual goals for bus improvements:
  - 10 miles of new bus lane
  - 5 miles of upgrades to existing bus lanes
  - 300 intersections of new TSP

# Tremont Avenue

## Sedgwick Ave to Boston Rd

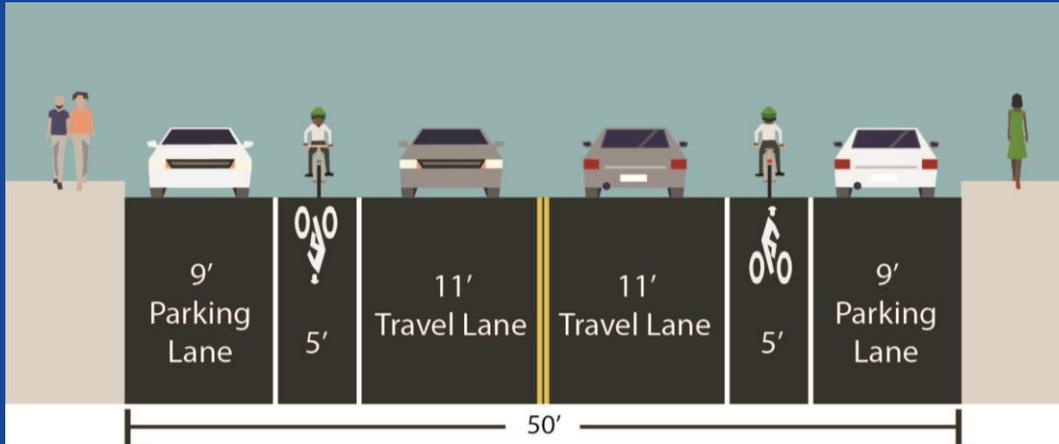


- Bx36 bus route carries 36,800 weekday riders
- Major destinations:
  - Tremont Avenue Shopping
  - Tremont Park
  - Connections 11 Bus Routes and the B/D, 2/5 Subway Lines and Metro-North Trains
- Average bus speeds: 4.3 mph during PM peak
- Key issues:
  - Congested corridor w/ slow bus speeds
  - Double parking
  - Vehicles blocking bus stops



E Tremont and Southern Blvd (looking west)

# Tremont Ave: Current Conditions



E Tremont and Monterey Ave (looking west)



E Tremont and Mapes Ave (looking east)

# Tremont Ave: Potential Treatments

Treatment A : Queue Jump Signals



5<sup>th</sup> Ave at 79<sup>th</sup> St, Manhattan

Treatment B: Short Segments of Bus Lanes



Broadway at 78<sup>th</sup> St, Queens

DOT will study feasibility by analyzing:

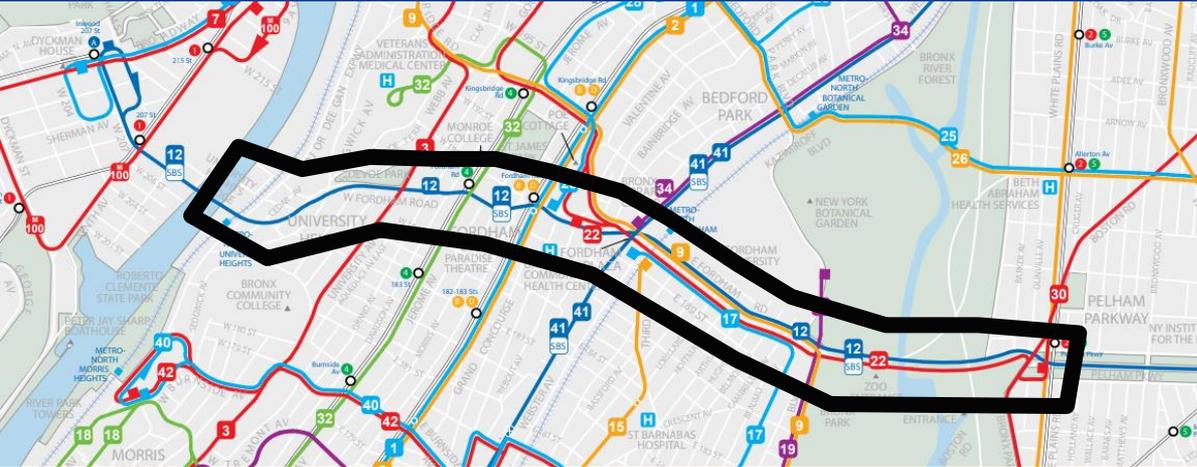
- Geometric feasibility
- Traffic volumes and turning movements
- Curb access / double parking issues
- Existing bus delays

Benefits of potential treatments:

- Increases bus speeds by bypassing traffic queues
- Make bus travel times more reliable

# Fordham Rd

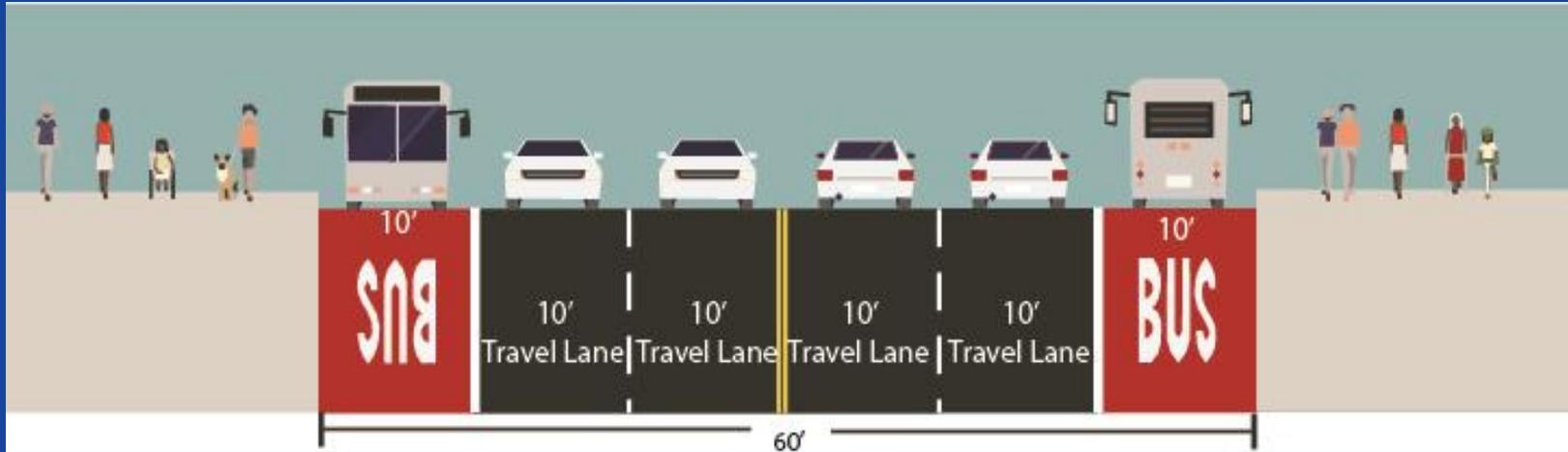
## Cedar Ave to White Plains Rd



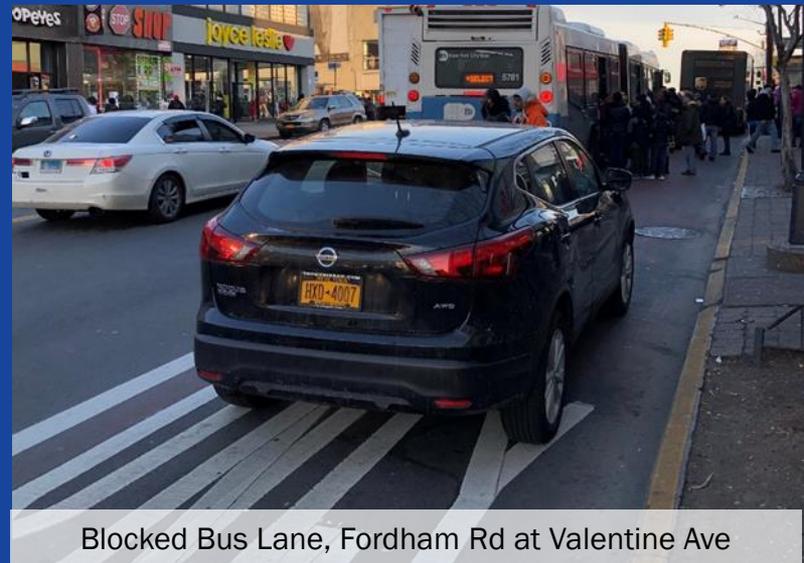
- Bx9, Bx12 SBS/Local, Bx17, and Bx22 carry 113,700 weekday riders, of which 53,100 use the Bx12 SBS & Local
- Major destinations:
  - Fordham Rd Shopping District, Arthur Avenue, and Fordham Plaza
  - Bronx Zoo, NY Botanical Garden
  - Fordham University
  - 1, 2, 4, 5, A, B/D subways; Metro North train
- Bus speeds have significantly and consistently declined in recent years
- Key issues:
  - Traffic congestion
  - Heavy commercial activity
  - Sidewalk crowding



# Fordham Rd: Current Conditions



Bx12 SBS, Fordham Rd at University Ave



Blocked Bus Lane, Fordham Rd at Valentine Ave

# Fordham Rd: Potential Treatments

## Benefits of treatments:

- Increases bus speeds
- Decrease travel times and improve reliability for 113,700 riders
- More efficient organization of travel lanes and accommodation of commercial loading needs
- Enhances pedestrian safety and reduces sidewalk crowding



Bus Queue Jump Signal  
(79 St, Manhattan)



Offset Bus Lanes (Webster Ave)

# Next Steps

## Fall 2019

- Present potential treatments to CBs
- Ongoing coordination with MTA
- Collect feedback from businesses
- Additional data analysis and plan development

## Winter 2019/2020

- Develop draft street design plans
- Present draft plans to community boards

## Spring 2020

- Develop final street design plans
- Present final plans to community boards

## Summer/Fall 2020

- Implement project improvements

# Thank you

[FastForward.mta.info](https://www.fastforward.mta.info)

[New.mta.info/BronxBusRedesign](https://www.new.mta.info/BronxBusRedesign)

[#fastforwardNYC](https://twitter.com/fastforwardNYC)