Fast Free Bus Retwork Redesign Final Place

October 24, 2019

w York City Transn-

Highlights

New Service

- Two new local routes (Bx25, M125)
- One new express route (BxM5)

Bus Stop Balancing

- ~400 stops removed (18% of total stops)
- 20 seconds saved for every stop removed
- Local bus average stop spacing improved to 1,100
 feet from 882 feet today
- 44 of 46 routes received bus stop balancing

Straighten and Simplify Routes

18 local/limited routes more direct (39% of routes)

Improved Connectivity

- Improved bus connections on 7 routes which are crucial for intra-borough travel
- 3 routes now serve ADA accessible subway stations
- Improved access to jobs
 - 18% increase for Co-op City residents
 - 15% increase for Soundview residents
 - 12% increase for Central Bronx residents

Increased Frequency

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

More Bus Priority

NYCDOT has identified 10 transit priority corridors in the Bronx



Proposed Final Plan



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 on key east-west corridors whenever possible
- Improved frequency on certain north-south routes as well

More Bus Priority

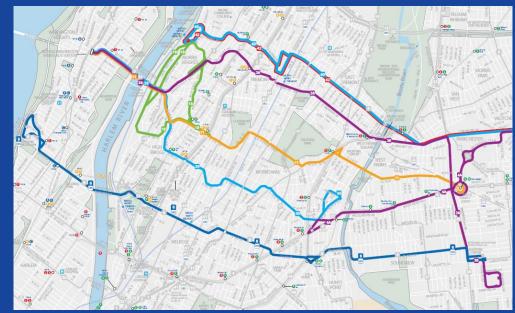
- NYCDOT has identified key transit priority corridors in the Bronx
- Bus lanes and other priority treatments would provide the biggest benefit to customers
- NYCDOT, with MTA, continues to expand Transit Signal Priority (TSP) in the Bronx



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)

Central Bronx





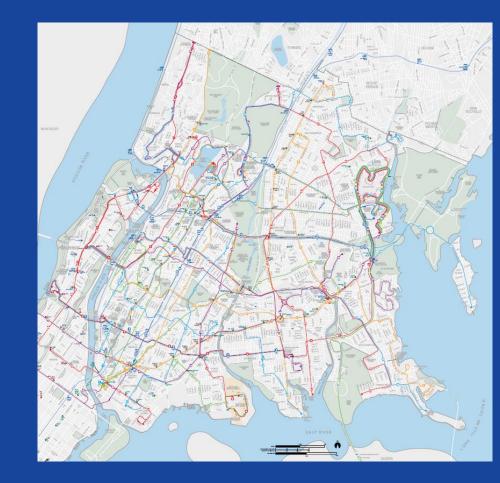
Bus Stop Balancing

- 450 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)

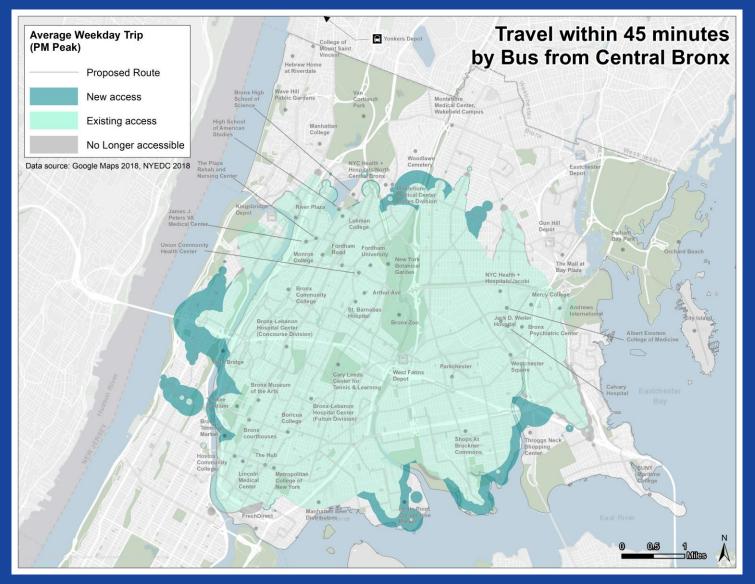




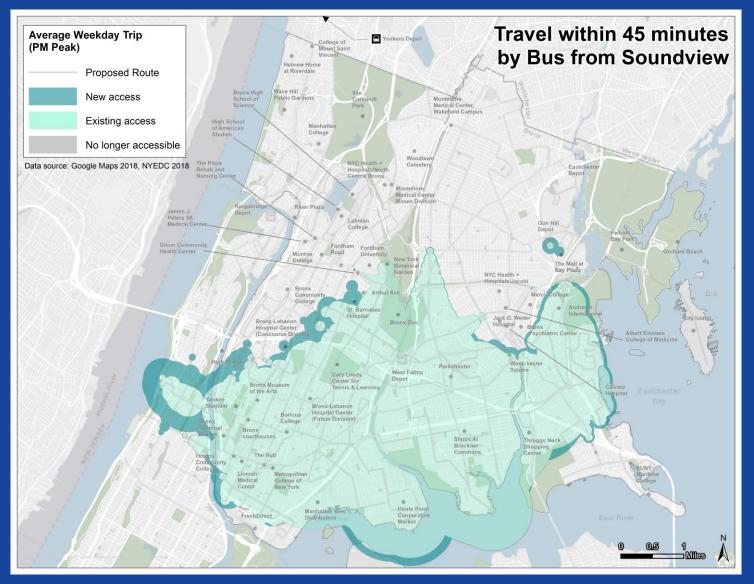
- Ease of connections at key transfer locations
- Route alignment changes bring new access for customers
 - Bx6 SBS extension to
 Soundview
 - Bx11 extension to Parkchester
 - Bx18 extension in High Bridge
 - Bx25 new service from Northern Co-op City to Bedford Park
 - Bx30 reroute to Boston Rd
 - Bx34 reroute to terminate at Fordham Plaza
 - Bx35 extension to West Farms
 - Bx40/42 new connection to E
 180 St 25 station



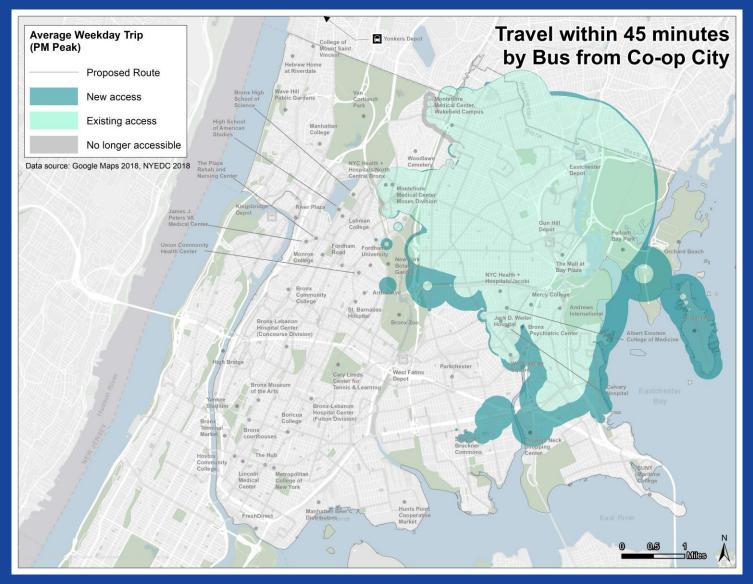




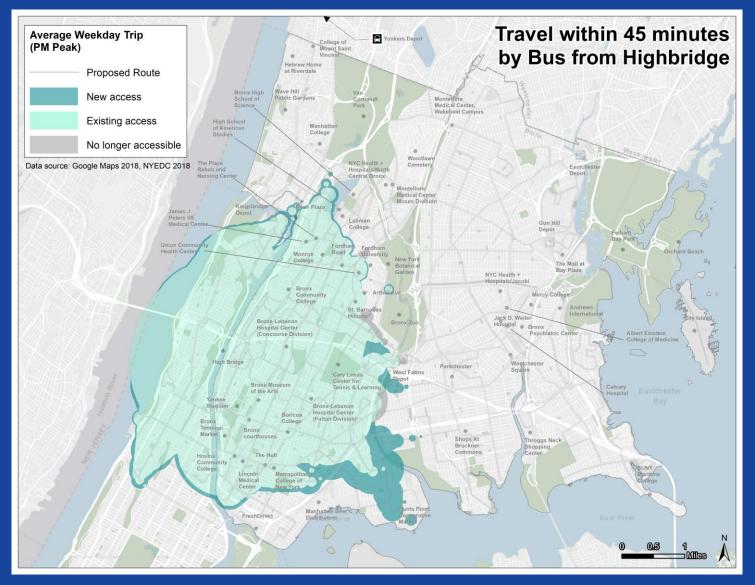




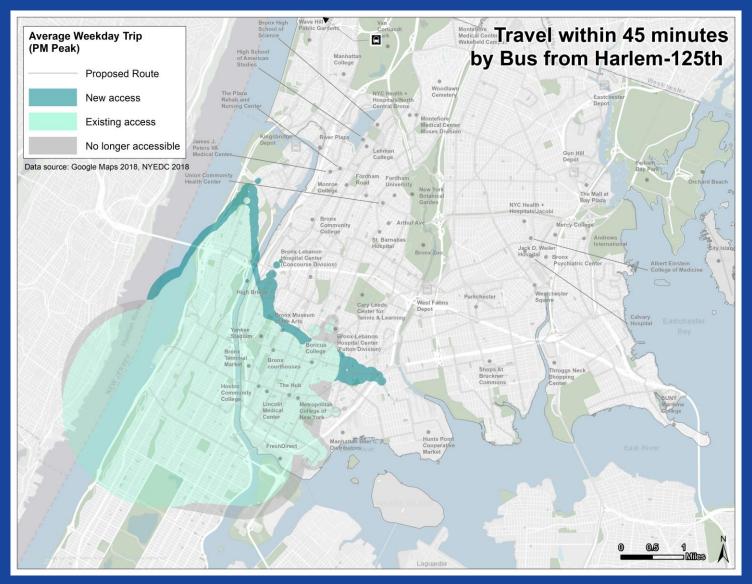














Increased Frequency

Route	Frequency	Proposed	Proposed Frequency - Weekday (min.)				Proposed Service Span - Weekday		
	(min.)	(min.)	AM Peak	Midday	PM Peak	Evening	Overnight	SB/WB	NB/EB
Bx1	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
Bx1 LTD			8	10	8	-	-	5:45 am - 6:30 pm	6:45 am - 8:00 pm
Bx2	15-or-better	15-or-better	8	9	8	15	-	5:00 am - 11:30 pm	6:00 am - 1:00 am
Bx1/2 Combined	8-or-better	8-or-better	4	5	4	7	-		
Bx3	8-or-better	8-or-better	6	7	7	8	-	5:15 am - 12:45 am	5:30 am - 1:30 am
Bx4	30-or-better	15-or-better	10	15	12	15	-	5:00 am - 12:45 am	5:30 am - 1:30 am
Bx4A	30-or-better	15-or-better	12	15	12	15	-	5:30 am - 12:00 am	5:30 am - 1:00 am
Bx4/4A Combined	15-or-better	8-or-better	6	8	6	8	-		
Bx5	15-or-better	15-or-better	5	12	8	9	-	5:00 am - 12:45 am	5:15 am - 1:15 am
Bx6	15-or-better	8-or-better	6	8	6	8	60	24 hours	24 hours
Bx6 SBS	15-or-better	15-or-better	8	12	10	10	-	5:30 am - 9:15 pm	5:30 am - 9:45 pm
Bx7	15-or-better	15-or-better	7	11	7	7	-	4:45 am - 1:30 am	4:45 am - 12:45 am
Bx8	15-or-better	15-or-better	9	13	10	12	-	6:00 am - 10:30 pm	5:30 am - 9:30 pm
Bx9	8-or-better	8-or-better	5	8	5	8	45	24 hours	24 hours
Bx10	15-or-better	15-or-better	6	10	8	9	40	24 hours	24 hours
Bx11	15-or-better	8-or-better	5	8	6	8	40	24 hours	24 hours
Bx12	15-or-better	15-or-better	10	12	9	13	40	24 hours	24 hours
Bx12 SBS	8-or-better	8-or-better	4	5	5	6	-	5:15 am - 10:00 pm	5:00 am - 11:00 pm
Bx13	15-or-better	8-or-better	4	8	4	6	-	5:30 am - 1:00 am	5:00 am - 12:30 am
Bx15	15-or-better	15-or-better	8	12	9	10	30	24 hours	24 hours
Bx15 LTD	15-or-better	15-or-better	7	11	8	12	-	5:00 am - 6:45 pm	5:30 am - 7:45 pm
Bx15 Combined	8-or-better	8 or better	4	6	4	6	30		
Bx16	30-or-better	30-or-better	7	20	10	17	-	5:00 am - 1:15 am	5:30 am - 12:30 am
Bx17	15-or-better	15-or-better	6	12	9	12	-	4:30 am - 12:45 am	4:15 am - 12:00 am
Bx18	30 or better	30-or-better	10	20	10	17	-	5:00 am - 1:00 am	5:00 am - 12:45 am
Bx19	8-or-better	8-or-better	7	8	7	8	45	24 hours	24 hours
Bx20	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
Bx21	15 or better	15-or-better	7	10	8	10	45	24 hours	24 hours
Bx22	15-or-better	15-or-better	7	12	8	10	60	24 hours	24 hours
Bx23	30-or-better	30-or-better	6	20	6	15	-	5:30 am - 1:00 am	4:45 am - 11:45 pm
Bx24	30-or-better	30-or-better	30	30	30	30	60	24 hours	24 hours
Bx25	-	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	Proposed	Proposed Frequency - Weekday (min.)				Proposed Service Span - Weekday		
	(min.)	(min.)	AM Peak	Midday	PM Peak	Evening	Overnight	SB/WB	NB/EB
Bx26	15-or-better	30-or-better	17	24	18	24	-	5:30 am - 11:00 pm	6:15 am - 11:45 pm
Bx25/26 Combined	-	15-or-better	9	12	9	12	-		
Bx27	15-or-better	15-or-better	5	12	6	9	40	24 hours	24 hours
Bx28	15-or-better	15-or-better	10	15	11	13	40	24 hours	24 Hours
Bx38	15-or-better	15-or-better	10	15	11	13	-	5:45 am - 9:45 pm	6:45 am - 10:00 pm
Bx28/38 Combined	8-or-better	8-or-better	5	8	6	7	40		
Bx29	30-or-better	30-or-better	15	30	15	20	40	24 hours	24 hours
Bx30	15-or-better	15-or-better	8	13	9	12	-	5:15 am - 11:30 pm	6:00 am - 12:00 am
Bx31	15-or-better	15-or-better	8	12	9	12	-	5:15 am - 1:15 am	4:45 am - 12:45 am
Bx32	30-or-better	30-or-better	9	13	11	20	-	6:00 am - 12:00 am	6:15 am - 11:30 pm
Bx33	30-or-better	30-or-better	15	24	16	30	-	5:00 am - 12:30 am	4:30 am - 12:00 am
Bx34	30-or-better	30-or-better	13	20	16	20	-	5:00 am - 1:00 am	5:00 am - 12:30 am
Bx35	15-or-better	15-or-better	6	10	8	10	60	24 hours	24 hours
Bx36	15-or-better	15-or-better	9	9	8	10	50	24 hours	24 hours
Bx36 LTD	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"
Bx36 Combined	15-or-better	15-or-better	5	9	5	10	50		
Bx39	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)
Bx40	30-or-better	30-or-better	15	17	15	17	60	24 hours	24 hours
Bx42	30-or-better	30-or-better	15	17	15	15	-	4:30 am - 1:00 am	4:00 am - 12:45 am
Bx40/42 Combined	15-or-better	15-or-better	8	9	8	8	60		
Bx41	15-or-better	15-or-better	12	12	11	11	60	24 hours	24 hours
Bx41 SBS	15-or-better	8-or-better	8	8	8	8	-	5:30 am - 9:00 pm	6:00 am - 9:45 pm
Bx46	30-or-better	30-or-better	30	30	30	30	-	6:00 am - 12:00 am	5:30 am - 11:30 pm
Q50 LTD	30-or-better	30-or-better	15	30	15	24	-	3:30 am - 12:00 am	4:25 am - 1:15 am
M100	15-or-better	15-or-better	8	8	9	12	-	4:15 am - 12:15 am	5:15 am - 1:15 am
M125	-	8-or-better	8	8	8	8	60	24 hours	24 hours

No change in frequency

Increase in frequency

Decrease in frequency



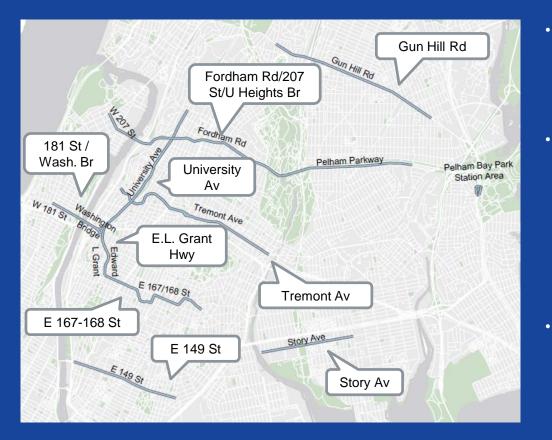
Express Bus Schedule Changes

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



Identified Bus Priority Corridors



- NYCDOT 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 buspriority corridors using the following criteria:
 - Demand for bus service
 - Bus performance (speed and reliability)
 - Service levels proposed by MTA
 - Neighborhood demographics
 - Feasibility of implementation
- NYCDOT 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



- NYCDOT has developed and implemented a variety of bus priority treatments to provide faster and more reliable bus service
- For each priority corridor, NYCDOT will investigate improvements that may include the following:
 - New bus lanes
 - Upgraded bus lanes
 - Protected bus lanes
 - Transit and freight priority streets
 - Bus boarders
 - Bus queue jump signals
 - Curb management
 - Pedestrian safety
 - Bus stop accessibility
 - Turn restrictions
- NYCDOT is also exploring opportunities to implement bus-supportive technologies throughout the Bronx, including Transit Signal Priority (TSP) and Real-Time Passenger Information (RTPI)



Post-Draft Plan Update



Outreach Summary

200	✓Subway stations with digital screens ran digital messages systemwide at time of posting
50	\checkmark 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
\checkmark	✓Met with all stakeholders who requested a meeting or phone call



Outreach Summary

16,000	✓Pamphlets handed out by our street team or distributed on buses
15,000	✓Unique project webpage views
6,000	 Posters printed for distribution on buses and in subway stations
2,419	✓ Digital screens on buses ran digital messages systemwide at time of posting
2,000	✓Average views per social media post
1,300	 ✓ Surveys completed between June and August
1,150	\checkmark Comments received via webmail, phone, twitter and mail
1,000	 ✓ Survey cards distributed



Regular Bus Service Changes: Co-op City

Bx23

- 6-min peak/20-min off-peak
- All existing Bx23 stops will be maintained

Bx25/26

- New Bx25 route to provide service between northern Co-op City and Norwood via Allerton Ave
- Bx26 will maintain existing routing
- Existing Bx26 frequency split with Bx25: each at 12-min peak/30-min off-peak

Bx28/38

- Bx28 will maintain existing routing in Co-op City and proposed routing under Draft Plan in Norwood/Bedford Park
- Bx38 will maintain existing routing
- Both routes have improved frequency of 10/11-min peaks/13-min evening - combined 5/6-min peaks/7-min

Bx29

Draft Plan proposal moving forward

Bx30

Existing routing in Co-op City maintained, proposed routing under Draft Plan along Boston Road moving forward

Q50 Limited

Will terminate at Pelham Bay Park 6 station in off-peak with existing alignment (serving Co-op City) during peaks





Regular Bus Service Changes: Country Club/Locust Point/Throgs Neck

Bx8

Existing routing will be maintained

Bx24

 Existing routing will be largely maintained with slight changes at Country Club Rd and Spencer Dr

Bx40/42

 Existing routing will be maintained in Throgs Neck, proposed western alignment under Draft Plan moving forward





Express Bus Service Changes

BxM1

• Draft Plan proposal moving forward

BxM2

Draft Plan proposal moving forward

BxM4

- Community and political opposition to proposal
- Service on majority of Grand Concourse will be maintained
- Route will begin at W 205 St/Paul Av, north Paul Av, right
 W Mosholu Pkwy S onto Grand Concourse
- Service in Manhattan will be maintained as it is today
- Service span: 5:30 7:30am and 4:30 6:30pm with 5 trips in each period

BxM5

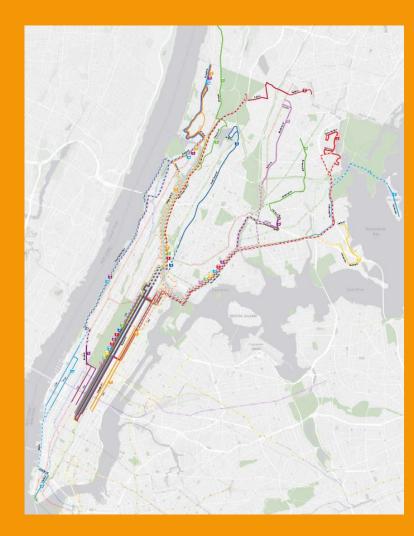
- Will become northern replacement for existing BxM4
 service (considered new route)
- Route will begin at Mundy Ln/Pitman Av, left Nereid Av, onto McLean Av, left Kimball Av, right E 233 St, onto Major Deegan Expwy, Madison Ave Bridge, left 5 Av to existing routing in Manhattan
- Service span: 5:30 7:30am and 4:30 6:30pm with 5 trips in each period

BxM11

• Under Final Plan routing will be that of BxM5 in Draft Plan

BxM17

 Under Final Plan will no longer be proposed due to community and political requests





Next Steps



Outreach

- We will be out and about in the Bronx and Manhattan to hear from customers & other stakeholders
- Detailed information for public input sessions will be on the project website closer to publication:
 - Community Board presentations
 - Pop-up events and informational sessions
 - Open houses

• We will also have an alternative Trip Planner available on the project website to allow customers to test out their travel options



Implementation

- Following outreach, we will begin to finalize the <u>Bronx</u> <u>Bus Network Redesign Plan</u> & 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



Bronx Bus Network Redesign Project Timeline (Updated)



