University Ave North Bus & Bike Improvements

Community Board 7 – Traffic & Transportation Committee

October 7, 2021







Table of Contents

- 1. Project Background
- 2. Proposed Design
- 3. Next Steps



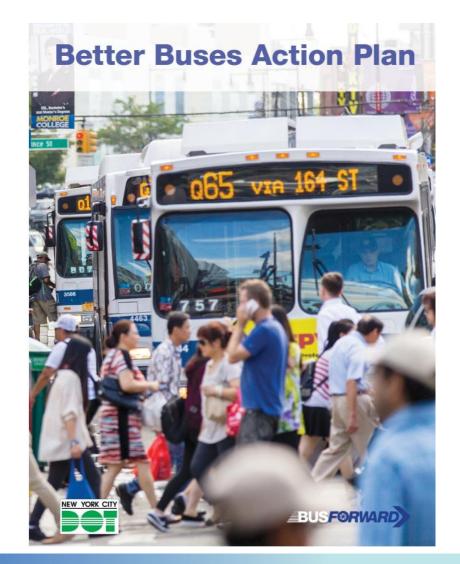


Background



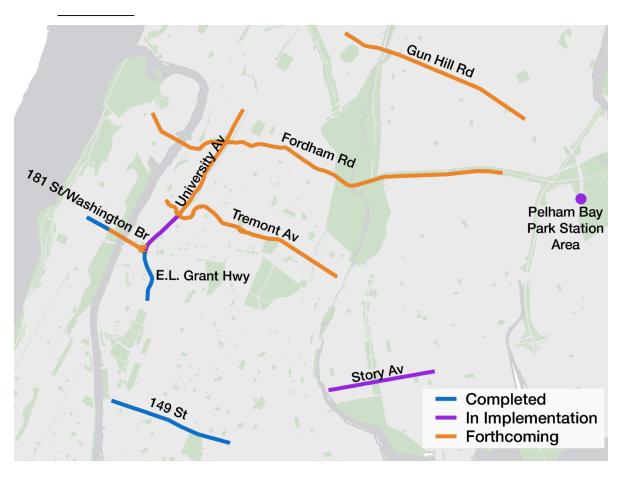
Better Buses Action Plan

- Improve bus speeds by 25%
- Install 10-15 miles of new bus lanes per year
- Improve 5 miles of existing bus lanes per year
- Support MTA Bus Network
 Redesign efforts with borough
 bus priority plans





Bus Priority Corridors



- NYC DOT analyzed Bronx corridors to determine where bus lanes and other bus priority are most needed
- University Ave was identified as a top Bronx corridor
- High ranking due to:
 - High ridership & high volume of buses
 - Slow and unreliable bus service
 - Important crossborough connections





Outreach

Community Engagement to Date

Community Board 7

- November 2019 Full Board: MTA Bronx Bus Redesign
- April 2020 Transportation Committee: Potential treatments for University Ave – North
- July 2021 Virtual meeting with CB 5 District Manager + CB 7
 Committee Chair: Revised potential treatments





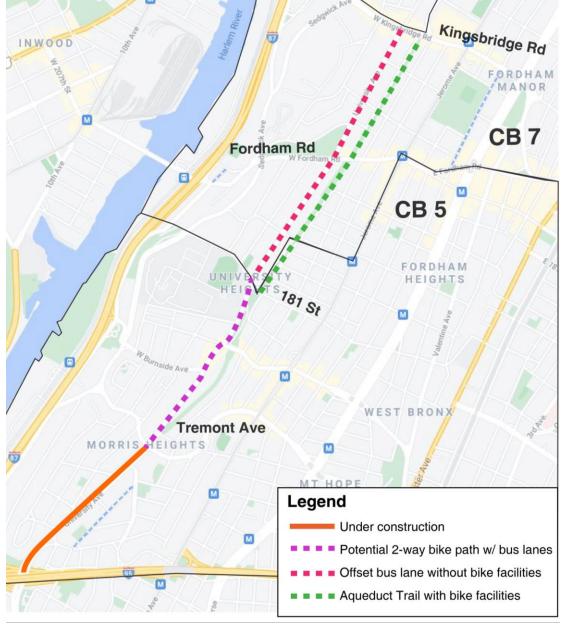
Project Status Update

Washington Bridge to Tremont Ave:

- Currently under construction
- 5 of 6 concrete boarding islands completed

Tremont Ave to Kingsbridge Rd:

- Planning/design phase
- Current design proposal has four distinct segments
- Narrow roadway presented constraints for both bus and bike treatments



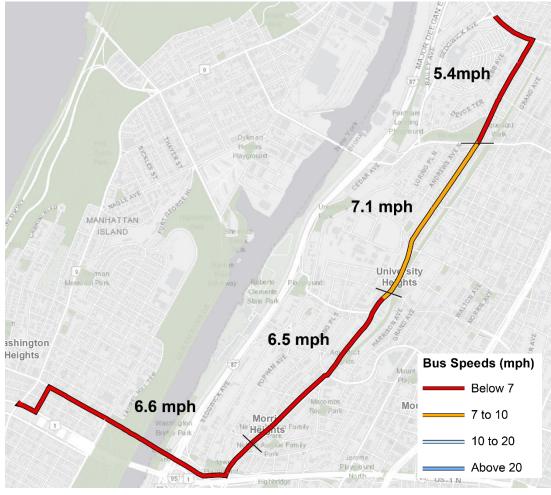




Bus Speeds

Issues Identified Along University Ave: Slow Bus Speeds

 Average southbound bus speeds during AM peak (7AM – 10AM) range from 5.4 – 7.1 mph



Source: MTA

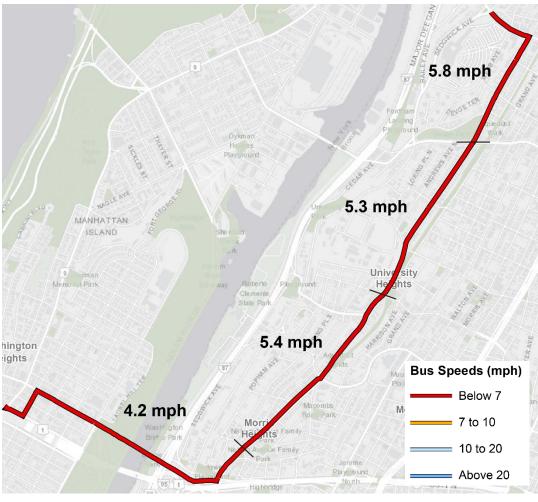




Bus Speeds

Issues Identified Along University Ave: Slow Bus Speeds

 Average northbound bus speeds during PM (3PM – 7PM) peak range from 4.2 – 5.8 mph



Source: MTA





Cycling in Numbers

24% (nearly 1.6 million) of adult New Yorkers **ride a bike regularly**

540,000 daily cycling commuting trips in 2019

- +116% growth (2008-2018)
- +35% growth (2013-2018)

15% of New Yorkers use bike share (Mobility Survey, 2018)

Citi Bike regularly serves over 80,000 trips per day; 19.5 million trips in 2020







Crash Statistics

University Ave, E Tremont Ave to E 181st St

Injury Summary, 2014-2018 (5 years)

	Total Injuries	Severe Injuries	Fatalities	KSI
Pedestrian	24	1	1	2
Bicyclists	12	1	0	1
Motor Vehicle Occupant	161	2	1	3
Total	197	4	2	6

Fatalities, 01/01/2014 - 01/07/2021: 3

Vision Zero Priority Area

- 197 people have been injured, including 4 severely, and 2 killed in 0.6 miles
- This section of University Ave ranks in the top 33% for killed or severely injured (KSI) in all of the Bronx
- In 2020, 22 cyclists were killed citywide; 8 were killed in the Bronx

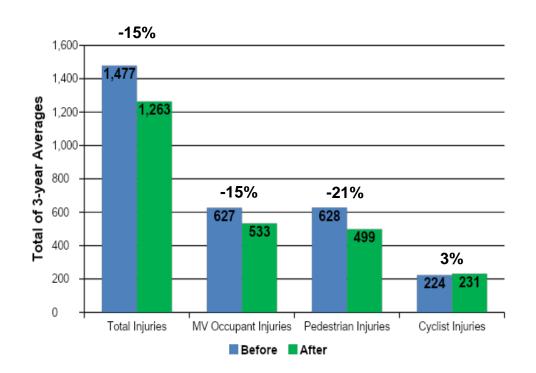




Safety Benefits of Protected Bike Lane

Protected Bike Lanes

Before and After Crash Data, 2007 - 2017



Data from 25 separate protected bicycle lane projects installed from 2007-2014 with 3 years of after data. Includes portions of 1 Ave, 2 Ave, 8 Ave, 9 Ave, Broadway, Columbus Ave, Hudson St, Lafayette St / 4 Ave, Sands St, Allen/Pike St, Kent Ave, Prospect Park West, Flushing Ave, Bruckner Blvd & Longfellow Ave, Imlay St / Conover St, Paerdegat Ave. Only sections of projects that included protected bike lanes were analyzed. Source: NYPD AIS/TAMS Crash Database







Green Wave: A Plan for Cycling in New York City

Ne

Analysis of fatalities key factors (2014-Present):

- 60% of fatalities happened at intersections; 23% involved a vehicle turn; 16% involved a driver's failure to yield the right of way
- Nearly 90% of fatalities happened on streets without bike lanes

Citywide Protected Bicycle Lane (PBL) Network

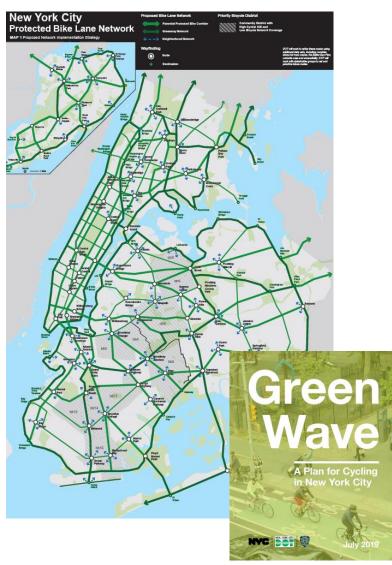
 Build 30 miles of protected bicycle lane annually, guided by a PBL vision document.

Better Design:

- Implement new design standards based on national & international best practices to enhance safety at intersections.
- Continue piloting new designs with rigorous safety analysis

Education and Outreach:

- Launch next phase of Vision Zero public awareness campaign, educating drivers with a focus on cyclist safety — and expand the "Get There" bicycle encouragement/rules of the road campaign
- Educate all street users about safe truck operation on city streets
- Increase helmet giveaways and helmet use encouragement.







Protected Bike Lane Network

- Challenging street grid with few direct through routes. Minimal bike facilities.
- University Ave provides critical connection between protected bike lanes on University Ave (south of Tremont Ave) and Aqueduct Walk
- Connection to major destinations including the Washington Ave Br and Bronx Community College
- Future connections to the Fordham Area Bike Network
- University Ave is highlighted as a priority corridors in Connecting Communities: A Vision for the Harlem River Bridges report released in 2016







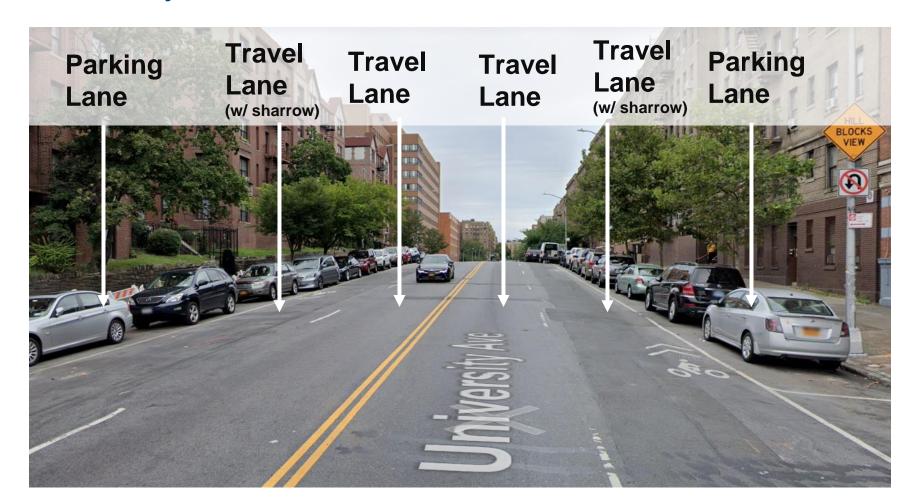
Proposed Design





Current Conditions

University Ave, North of Tremont Ave





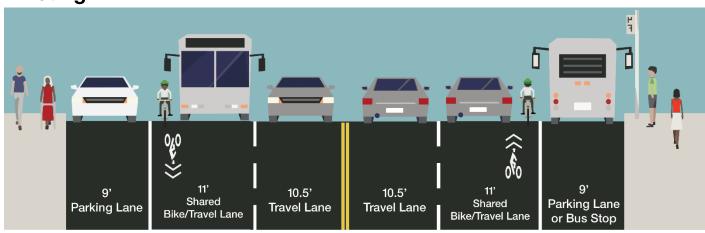


University Ave, from 181st St to Kingsbridge Rd

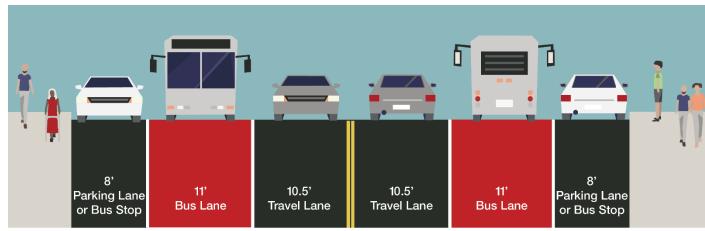
(Community Board 7)

- Bikes diverted to Aqueduct Walk
- Sharrows to be removed
- Install offset bus lanes in each direction
- Segment
 ~4500 (0.9
 miles)

Existing:



Proposed Treatment:

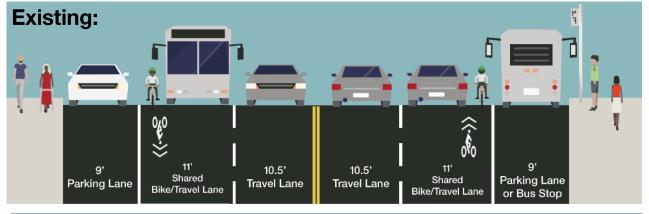


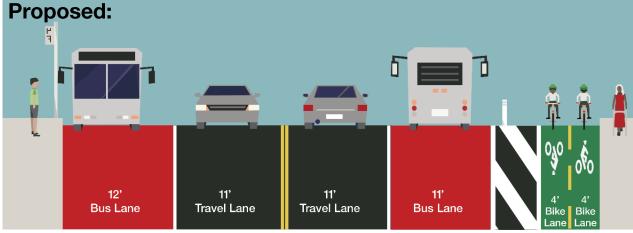




University Ave, from 179th St/Burnside Ave to 181st St

(Community Board 5)





- Two-way bike path on eastern curb
- 1 bus lane + 1 travel lane in each direction
- Segment ~780 ft (2 blocks)





University Ave, from Tremont Ave to 179th St/Burnside Ave

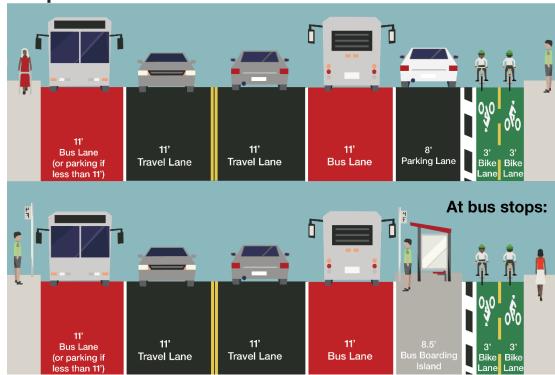
(Community Board 5)

- Two-way bike path on eastern curb
- Dedicated bus lanes in each direction
- Concrete boarding island at northbound bus stops
- Parking lane on the western curb is remaining width is under 11'
- Segment ~1800 ft (0.34 miles)

Existing:



Proposed Treatment:







Recap

Washington Bridge to Tremont Ave (CB 5):

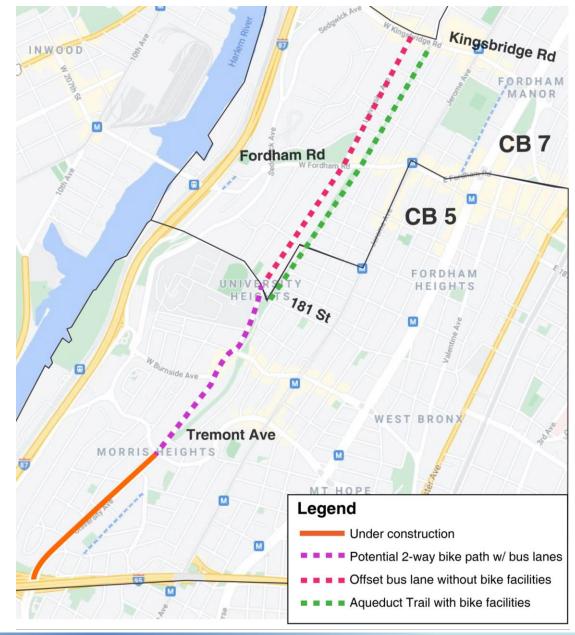
Currently under construction

Tremont Ave to 181st St (CB 5):

- Exploring two-way bike path on eastern curb
- Bike path transitions off University Ave and onto the Aqueduct Walk

181st **St to Kingsbridge Rd** (CB 7):

- Offset bus lanes
- Sharrows to be removed







Next Steps





Next Steps

Winter – Spring 2021:

DOT drafted conceptual design

July 2021:

Presented conceptual design to CB 5 + 7 District Managers

Fall 2021:

- Present to Community Board 5 + 7 Committees
- Continue traffic analysis
- Refine design of bicycle facilities along Aqueduct Walk

Winter 2021-2022:

Present to CB Full Boards on final design

Spring 2022:

Implementation from Tremont Ave to Kingsbridge Rd





Thank You!

Questions?











nyc_dot NYC DOT



