EASTCHESTER RD, WATERS PL, & CONNECTIONS

BICYCLE LANE NETWORK EXPANSION

Presented to Bronx Community Boards 11, 12
February 2023
Presentation Overview

1. Background
2. Proposal
3. Summary
4. Appendix
Background
Overview

Project Goals

- **Build** robust on-street bicycle network

- **Support** new scooter share riders and bicycle ridership growth

- **Improve** road safety for all road users

- **Create** new connections to key destinations:
  - Bronx Park
  - Pelham Bay Park
  - Pelham Gardens
  - Jacobi Medical Center
  - Bronx Behavioral Health Center
  - Bronx River, Moshulu-Pelham, and Hutchinson River Greenways
Background

Bike & Scooter Access in the Bronx

2021 E-Scooter Pilot expanded transportation and prompted a growth in scooter ridership on commercial streets in the East Bronx

• 1,000,000 trips in twelve months, averaging 2,800 trips daily following E-scooter expansion
• E-scooters provided “last mile” connections with high ridership near MTA transit, bus and ferry stops

Bicycle Network Projects to meet growth in ridership following e-scooter deployment

• Phase I (2021 – 2022)
  • E 233rd St – Protected Bike Lanes
  • Bronxdale Ave – Protected Bike Lanes
  • Laconia Ave – Standard Bike Lanes
  • Bronxdale Ave – Protected Bike Lane
  • White Plains Rd – Protected Bike Lane
  • Eastchester Rd (Phase I) – Standard Bike Lanes

• Phase II (2022 – 2023)
  • Lafayette Ave – Protected Bike Lanes
  • Soundview Ave Bike Network – Standard Bike Lanes
  • Eastchester Rd (Phase II) – Protected Bike Lanes

6,000 Scooters deployed within East Bronx Pilot Zone (2021 – 2022)

E-Scooter Pilot:
NYC DOT collaboration with Bird, Lime and Veo to deploy dock less E-Scooters in pilot zone
Background

**Green Wave: A Plan for Cycling in New York City**

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

**Green Wave Plan:**

**Citywide Protected Bike Lane Network:**
- Build 30 miles of protected bicycle lane annually
- Build 75 miles of bicycle infrastructure in 10 Bicycle Priority Districts (7 in Brooklyn, 3 in Queens) by 2022

**Better Design:**
- Implement new design standards based on national & international best practice 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 road campaign.
- Educate all street users about safe truck operation on city streets
- Increase helmet giveaways and helmet use encouragement

**NYPD Enforcement**
- Target enforcement on highest risk activities: speeding, failing to yield, blocking bike lanes, oversized trucks/trucks off route
Safety – Protected Bike Lanes
Street designs that include protected bike lanes increase safety for all users

- **15%** drop in all crashes with injuries
- **21%** drop in pedestrian injuries

on streets where protected bike lanes were installed 2007-2017

Injuries to cyclists increase only 3%, despite a **61% bike volume increase**

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
Background

Bicycle Route Selection

Existing Bicycle Lane Network

- Connections to Parks, Greenways
- Standard and shared bike network in Williamsbridge, Allerton and Morris Park (Laconia Av, Burke Av, Morris Park Ave)
- Difficult to access some destinations (Bronx Zoo, Pelham Bay Park)
- 2022 Install to provide access to Mosholu Pelham Greenway on Eastchester Rd

Street Network Issues

- Discontinuous streets & irregular street grid
- Narrow street widths
- Lack of connection to Hutchinson River Greenway
- Outstanding completion of north-south bicycle route on Eastchester Rd

Area Destinations

Parks: Pelham Bay, Seton Falls, & Bronx Parks
Transit: Williamsbridge
Schools: Albert Einstein College of Medicine, Mercy College, Yeshiva University Medical
Hospitals: Jacobi Medical, Bronx Behavioral Health Center, Montefiore Hospital, Calvary Hospital, NYC Children's Center hospital
Project History

2009

Safe Streets for Seniors Program installed standard bike lanes on Allerton Ave and intersection improvements at Eastchester Rd

2010-14

Safety Project installed wide parking lanes on Laconia Ave, E 233rd, Bronxwood Ave, Burke Ave and standard bike lanes on E 222nd St.

2017

Bicycle Network Improvements provided bike access to Shoelace Park with bike lane upgrades on Laconia Ave, E 233rd, St Bronxwood Ave, Burke Ave, E 213 St, E 216 St, E 225 St and E 226 St.

2021

E-Scooter pilot to expand bicycle infrastructure in the East Bronx in response to growing ridership for commercial uses

2021-22

Project development and outreach

2022

Eastchester Rd Phase I Implementation
Laconia – Pelham Pkwy N

2023

Project Update
Eastchester Rd Phase II Implementation
Pelham Pkwy N to Waters Pl/Westchester Ave
Burke Ave, Morris Park Ave
Eastchester Rd: Laconia Ave to Bronx/Pelham Pkwy

Organized roadway markings to discourage speeding and provide dedicated space for cyclists

**2022 Install - Standard Bicycle Lanes**

- Established one travel lane in each direction and created standard width travel and parking lanes
- Provided dedicated space for cyclists
- Established dedicated left turn lanes and painted median
- Provided connections to existing bike network at Laconia Ave and to the Mosholu-Pelham Greenway
Background

Design Toolkit

Shared Bicycle Lanes

**Sharrow markings** guide cyclists where to ride on the street

- Alert drivers & cyclists of shared space
- Provide wayfinding for cyclists
- Guide cyclists away from car doors

Conventional Bicycle Lanes

**Striped bicycle lane** provides dedicated space in the road

- Discourage speeding by visually narrowing the road
- Increase predictability by clearly defining road space for each user

Protected Bicycle Lanes

**Striped bicycle lane protected** by bollards or floating parking

- Maximizes traffic calming by physically narrowing roadways
- Increases safety for all road users by shortening crossing distances for pedestrians, & separating people driving and biking

*Edgecombe Ave, MN*

*Morris Park Ave, BX*

*Avenue V, BK*
Background

Project Location and Goals

Create Protected Bike Lane Connections

- Complete essential protected bike lane connection to fill gaps in the protected bike network in the East Bronx and to respond to the expected rise in scooter ridership

- Build new connections between hospitals & healthcare facilities

- Create new connections to Bronx River Greenway, Moshulu-Pelham Greenway & Hutchinson River Greenway

Proposed Routes

1. **Eastchester Rd** (Bronx/Pelham Pkwy – Waters Pl)
2. **Waters Pl** (Eastchester Rd – Westchester Ave)
3. **Morris Park Ave** (Newport Ave – Eastchester Rd)

**Goals:**

*Increase Safety for All Road Users & Support Bicycle & Scooter Ridership*
Proposal
**Proposal**

**1A Eastchester Rd: Pelham Pkwy N to Pelham Pkwy S**

*Provide dedicated space for cyclists*

**2023 Update – Curbside Bike Lanes**

- Establish two travel lane in each direction and one turn lane
- Provide curbside, dedicated space for cyclists
- Create standard width travel and parking lanes
- Connect cyclists to Mosholu-Pelham Greenway

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**Existing**

- West Sidewalk
- Travel Lane 10’
- Turn Lane 10’
- Travel Lane 10’
- Turn Lane 10’
- Travel Lane 10’
- East Sidewalk

**Proposed**

- West Sidewalk
- Travel Lane 10’
- Travel Lane 10’
- Turn Lane 11’
- Travel Lane 10’
- Shared Lane
- East Sidewalk

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**Example: MacDougal, MN**
Eastchester Rd: Pelham Pkwy S – Stillwell Ave

Organize roadway markings and provide bike connections to greenway

2023 Update – Protected Bike Lanes

- Maintain two northbound travel lane
- Provide protected bike lane on west curb
- Create standard width travel and parking lanes
- Connect cyclists to Mosholu-Pelham Greenway
- Provide ZICLA bus boarder at affected stops

Existing

- West Sidewalk
- 19’ Travel/Parking Lane
- 11’ Travel Lane
- 11’ Travel Lane
- 19’ Travel/Parking Lane
- East Sidewalk

Proposed

- West Sidewalk
- 4’ Travel Lane
- 4’ Travel Lane
- 10’ Travel Lane
- 11’ Travel Lane
- 11’ Travel Lane
- 18’ Parking/Travel Lane
- East Sidewalk

Example: Webster Ave, BX
Eastchester Rd: Stillwell Ave – Morris Park Ave

Organize roadway markings and provide bike connections to greenway

2023 Update – Protected Bike Lanes

- Maintain two northbound travel lane
- Provide protected bike lane on west curb
- Create standard width travel and parking lanes
- Connect cyclists to Mosholu-Pelham Greenway
- Provide concrete and ZICLA bus boarders at affected stops

Example: Webster Ave, BX
**Proposal**

### Eastchester Rd: Morris Park Ave – Sackett Ave

*Organize roadway markings and provide bike connections to greenway*

#### 2023 Update – Protected Bike Lanes

- Maintain two northbound travel lane
- Provide protected bike lane on west curb
- Create standard width travel and parking lanes
- Connect cyclists to Mosholu-Pelham Greenway

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**Existing**

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<th>West Sidewalk</th>
<th>21' Travel/Parking Lane</th>
<th>11' Travel Lane</th>
<th>11' Travel Lane</th>
<th>9' Travel Lane</th>
<th>13' Travel Lane</th>
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**Proposed**

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<th>11' Travel Lane</th>
<th>11' Travel Lane</th>
<th>10' Turn Lane</th>
<th>11' Travel Lane</th>
<th>9' NSA Existing</th>
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*Example: Webster Ave, BX*
Proposal

**Eastchester Rd: Sackett Ave – Waters Pl**

Organize roadway markings and provide bike connection to greenway

**Parking Protected Bicycle Path**
- Establish one northbound travel lane
- Provide two-way, parking protected bike path
- Create standard width travel and parking lanes
- Install new bus boarders at existing stop
- Provide connection to Waters Pl

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<th>West Sidewalk</th>
<th>19’ Travel/Parking Lane</th>
<th>11’ Travel Lane</th>
<th>11’ Travel Lane</th>
<th>19’ Travel/Parking Lane</th>
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**2023 Proposed**

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<th>11’ Travel Lane</th>
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Example: Willis Ave, BX
2 Water PI: Eastchester Rd to Westchester Ave

Organize roadway markings and provide bike connection to greenway

Parking Protected Bicycle Path

- Travel lane changes:
  - One northbound travel lane between Marconi St and Bronx State Hospital Entrance
  - One travel lane in each direction between Hospital Entrance and Fink Ave
- Provide two-way, parking protected bike path
- Create standard width parking and travel lanes
- Install new bus boarders at existing stops
- Connect cyclists to Hutchinson River Greenway at Westchester Ave

Example: Willis Ave, BX
**Proposal**

3 **Morris Park Ave: Newport Ave to Eastchester Rd**

Organize roadway markings and provide connections to existing bike network

**Shared Bicycle Lanes**

- Maintain existing angled parking and travel lanes
- Guide cyclists with shared lane markings
- Connect cyclists to existing bike lanes on Morris Park Ave, Hering Ave and Yates Ave

**Existing**

- South Sidewalk
- 38' Travel Lane/Angled Parking
- 13' Median
- 37' Travel Lane/Angled Parking
- North Sidewalk

**Proposed**

- South Sidewalk
- 38' Shared/Angled Parking
- 13' Median
- 37' Shared/Angled Parking
- North Sidewalk

Example: Edgecombe Ave, MN
Summary
Overview of Street Design

- Parking-Protected Bike Path
- Shared Bike Lanes
- Conventional Bike Lanes

Legend:
- Conventional Bike Lane
- Parking-protected Bike Lane
- Shared Bike Lane
Project Timeline

Eastchester Rd, Waters Pl and Burke Ave, Morris Park Ave Connections improve safety and provide access to major destinations including schools, hospitals, greenways and parks.

2023 Implementation following updates to 2021 CB Proposal according to NYDOT observations

• **Phase I: 2022**
  • Provided traffic calming and standard bike lanes on Eastchester Rd between Laconia Ave and Pelham Pkwy
  • Connection to Bronx River and Moshulu-Pelham Greenways

• **Phase II: 2023**
  • Protected bike lanes on Eastchester Rd between Pelham Pkwy and Water Pl
  • Protected bike lanes on Water Pl from Eastchester Rd to Westchester Ave
  • Connections to existing bike network and Bronx River Greenway on Burke Ave
  • Connection to Hutchinson River Greenway
THANK YOU!

Questions?
Pelham Pkwy South – Stillwell Ave: 2023 Update

Proposed Parking Removal
- Total removal of approximately **109 parking spaces on west curb**
- Maintenance of two travel lanes for PM rush with bikes would require additional removal of 81 parking spaces between Pelham Pkwy S and Sackett Ave
- 2021 proposed removal of 28 parking spaces between Sackett and Bassett Ave for visibility at overpass
Pelham Pkwy South – Stillwell Ave: 2021 Proposed

2021 proposal for full time removal of one northbound lane

Existing

- 19’ Travel/Parking Lane
- 11’ Travel Lane
- 11’ Travel Lane
- East Sidewalk

2021 Proposed

- 8’ Parking Lane
- 11’ Travel Lane
- 11’ Travel Lane
- 11’ Travel Lane
- 8’ Parking Lane
- East Sidewalk
Pelham Pkwy S – Stillwell Ave: 2023 Protected Bike Path

2021 Proposed

- Signal and Bike Units observation of queuing/backups to Stillwell Ave for northbound approach to Pelham Pkwy S
- Signal timing prioritization of Pelham Pkwy and school activity creates unmet demand
- Maintenance of two northbound lane required for PM peak with two-way protected bike path

2023 Proposed

- New Bus Boarder or Bulb
- Parking removal on west curb
- Two-stage bicycle crossing

Appendix
Stillwell Ave – Sackett Ave: 2023 Protected Bike Path

2021 Proposed

- Removal of northbound travel lane to be maintained

2023 Proposed

- Feasible bicycle crossing/transition to east curb at Sackett Ave requires parking loss between Morris Park Ave and Sackett Ave
- Additional SIM and Signals scope at affected bx31 bus stops and turns

- New Bus Island or Boarder
- Maintains parking on both sides
- Connection to two-way on east curb at Sackett Ave
- Parking loss on west curb
- Upgrade from standard lanes to two-way
- Signal Updates/Constraints at Morris Park Ave

Stillwell Ave – Sackett Ave: 2023 Protected Bike Path

2021 Proposed condition

- Removal of northbound travel lane to be maintained
Bus Stop Interactions

Example: Morris Park Av, BX

Standard Bike Lane Design at Bus Stops

- **Bus stops are maintained at existing locations along Eastchester Rd**
- At bus stops north of Pelham Pkwy, standard lane design becomes shared to indicate to cyclists of bus movement and to allow them to
**Bus Stop Interactions: Eastchester Rd, Waters Pl**

**Protected Bike Lane Design at Bus Stops**

- **Bus stops are maintained at existing locations along Eastchester Rd and Waters Pl**
- Buses stop at proposed bus boarders instead of pulling to the curb
- At bus stops, protected bike lane design changes to indicate to cyclists that they must yield to pedestrians and boarding passengers
Loading and Curb Access

**Driveways**

- Driveway access is maintained and indicated with markings

**Curb Access**

- Design maintains loading and access along the east side of the street

**Curb Management Tools**

- Potential for neighborhood loading zones, parking regulation changes for pickup/drop-off
Traffic Data Summary

Existing Conditions

- Traffic analysis using data collected in 2021

- Low through traffic on Eastchester Rd between Laconia Av and Pelham Pkwy
  Predominately residential land uses on both curbs north of Pelham Pkwy

- Higher volumes south of Pelham Pkwy North
  Multiple land uses and destinations: commercial, residential, hospitals

- Northbound volumes lower south of Pelham Pkwy in initial traffic counts
  • Revised design according to field observations to maintain approach to Pelham Pkwy S

2021 Peak Volumes

- Givan Av – ATR/TMC
  456 NB, 318 SB

- Burke Av – ATR/TMC
  504 NB, 339 SB

- E Gun Hill Rd – ATR/TMC
  252 NB, 164 SB

- Astor Pl – ATR/TMC
  419 NB, 288 SB

- Pelham Pkwy N – ATR/TMC
  495 NB, 337 SB

- Rhinelander Av – ATR/TMC
  269 NB, 900 SB

- Morris Park Ave – ATR/TMC
  357 NB, 522 SB

- Marconi St – ATR/TMC
  375 EB, 328 WB

- Fink Av – ATR/TMC
  178 NB, 646 SB