



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

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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, Mosholu-Pelham, and Hutchinson River Greenways



NYC Parks Imagery – Bronx Park

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

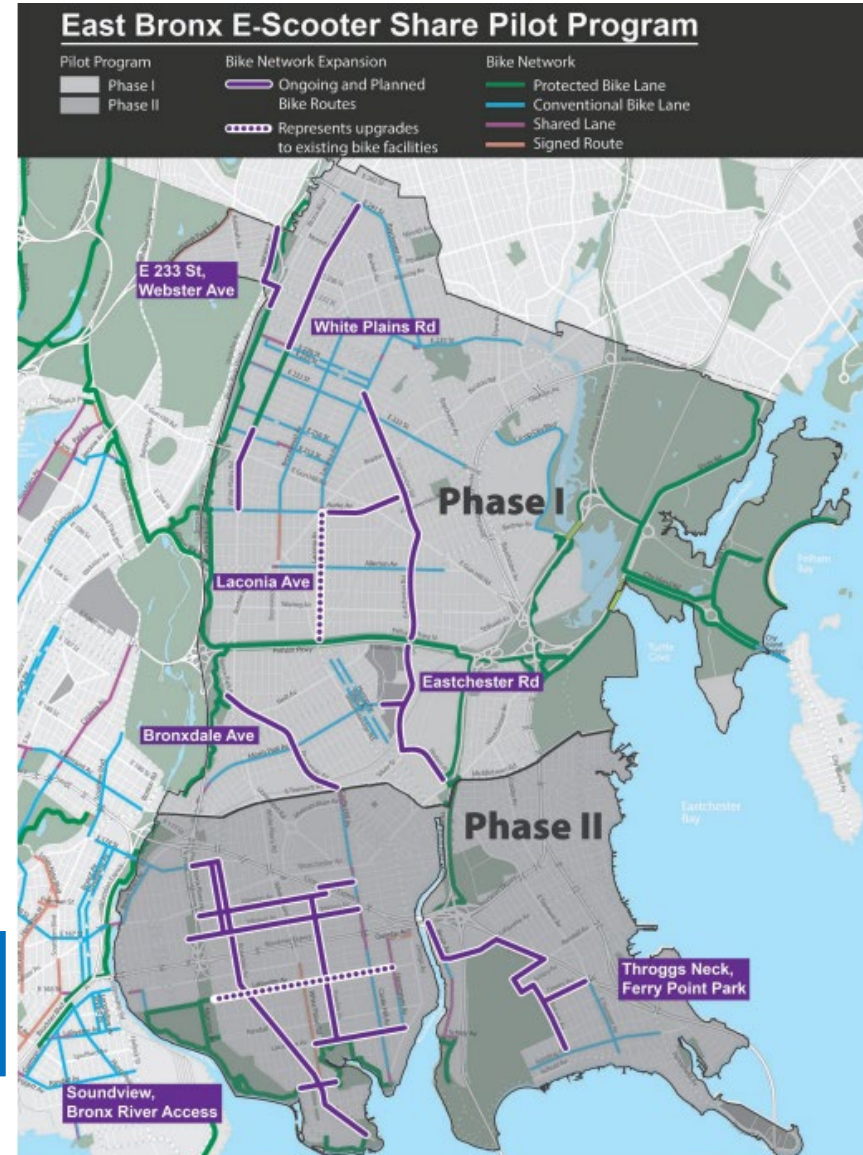
Bicycle Network Projects to meet growth in ridership following e-scooter deployment

- **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



Green Wave A Plan for Cycling in New York City



Analysis of fatalities – key findings (2014 - 2019):

- 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

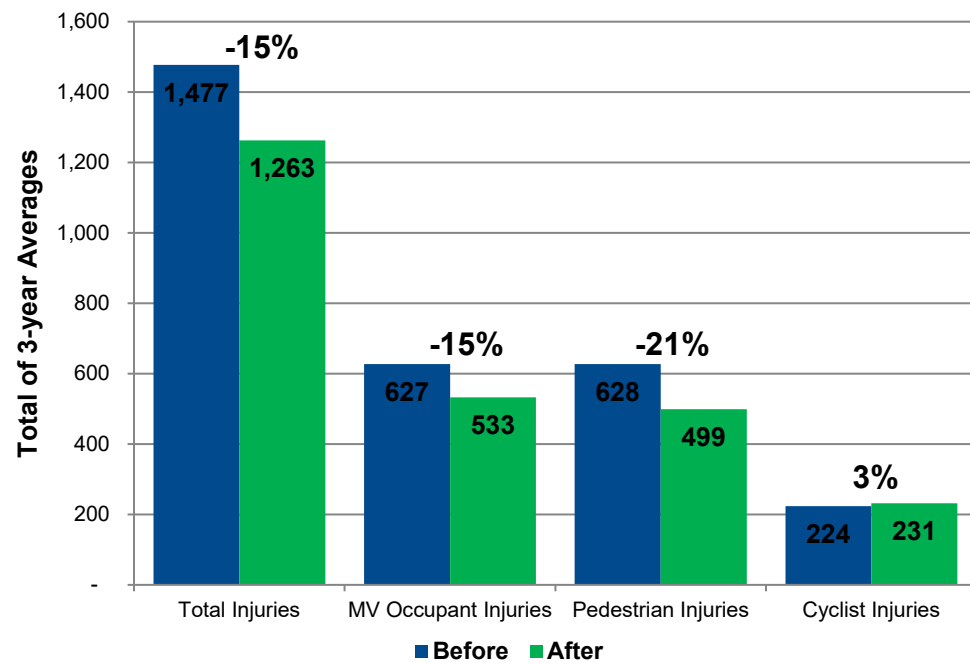
- 15% drop in all crashes with injuries
- 21% drop in pedestrian injuries

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

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



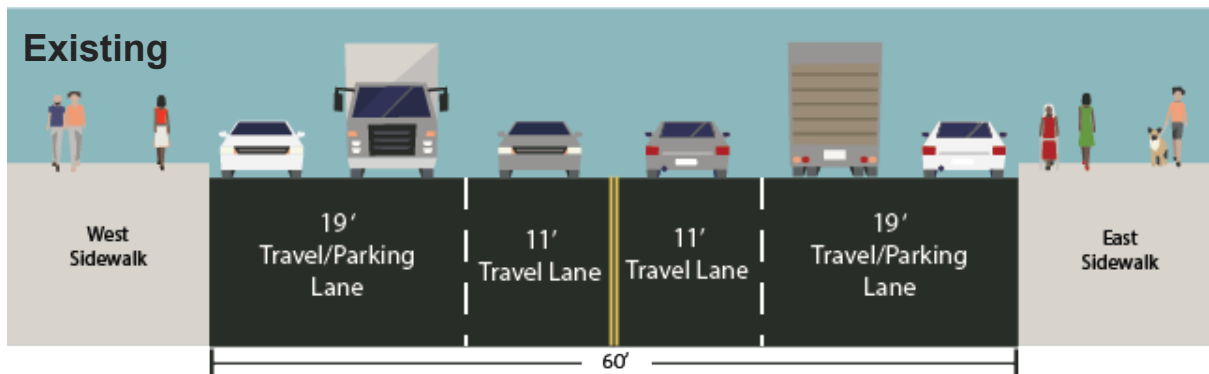
Eastchester Rd: Laconia Ave to Bronx/Pelham Pkwy

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

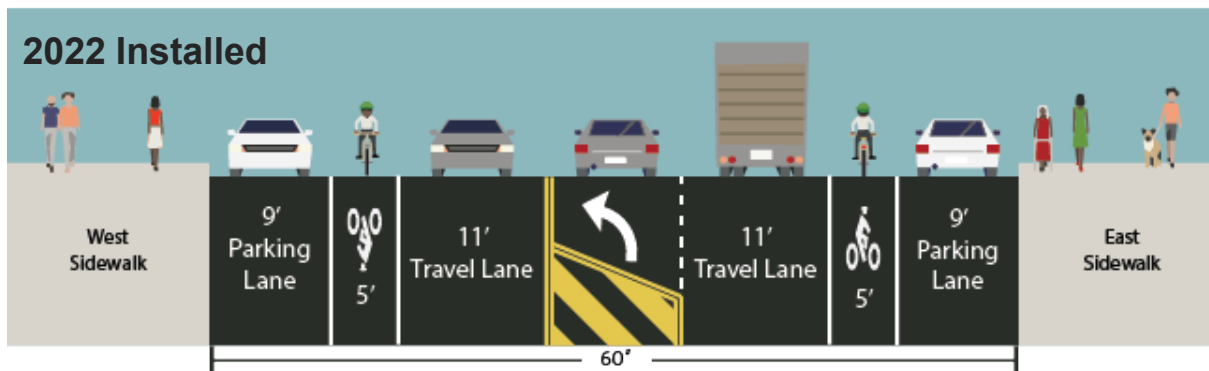
2022 Install - Standard Bicycle Lanes

- 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

Existing



2022 Installed



Design Toolkit

Shared Bicycle Lanes



Edgcombe Ave, MN

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



Morris Park Ave, BX

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



Avenue V, BK

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

Project Location and Goals

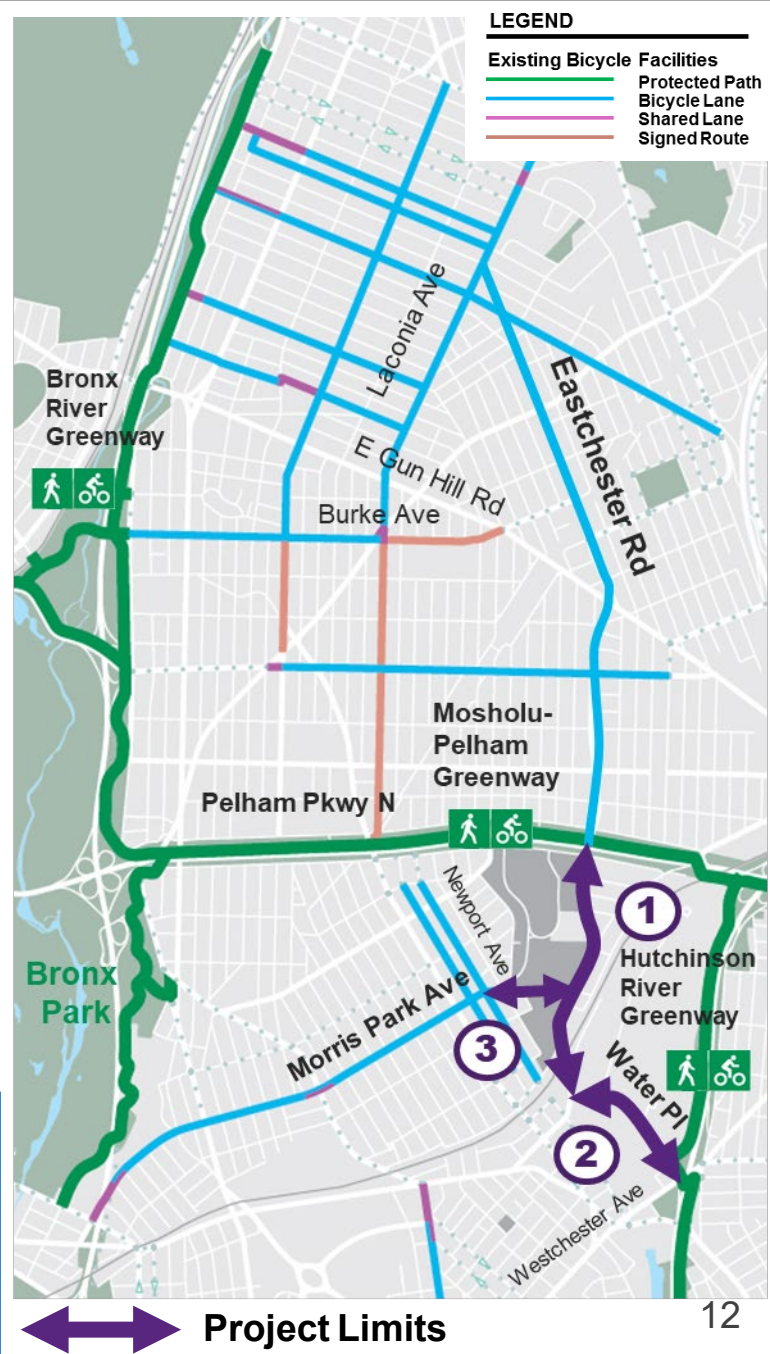
Create Protected Bike Lane Connections

- 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, Mosholu-Pelham Greenway & Hutchinson River Greenway

Proposed Routes

- ➊ **Eastchester Rd** (Bronx/Pelham Pkwy – Waters Pl)
- ➋ **Waters Pl** (Eastchester Rd – Westchester Ave)
- ➌ **Morris Park Ave** (Newport Ave – Eastchester Rd)

Goals:
Increase Safety for All Road Users & Support Bicycle & Scooter Ridership



Proposal

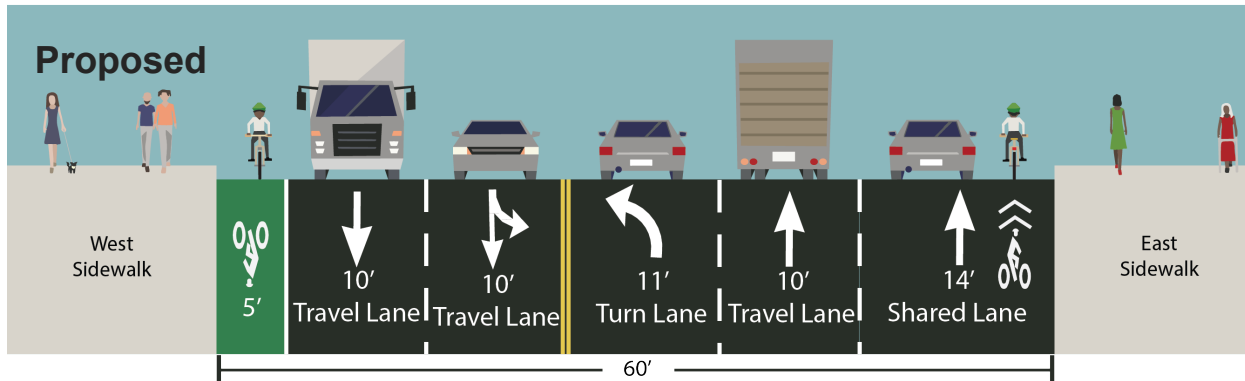
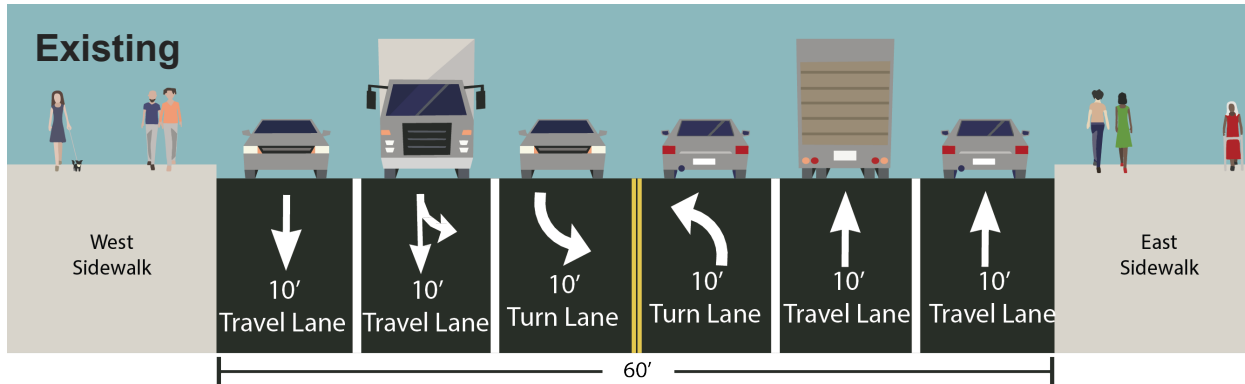
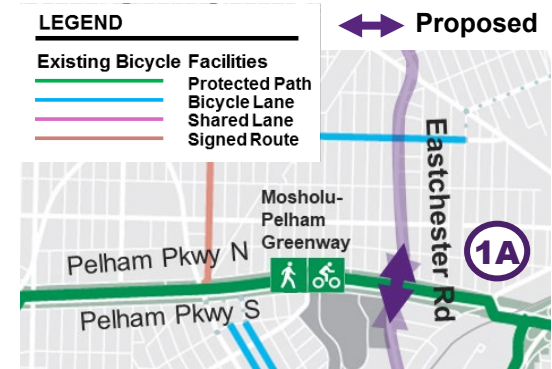
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1A Eastchester Rd: Pelham Pkwy N to Pelham Pkwy S

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



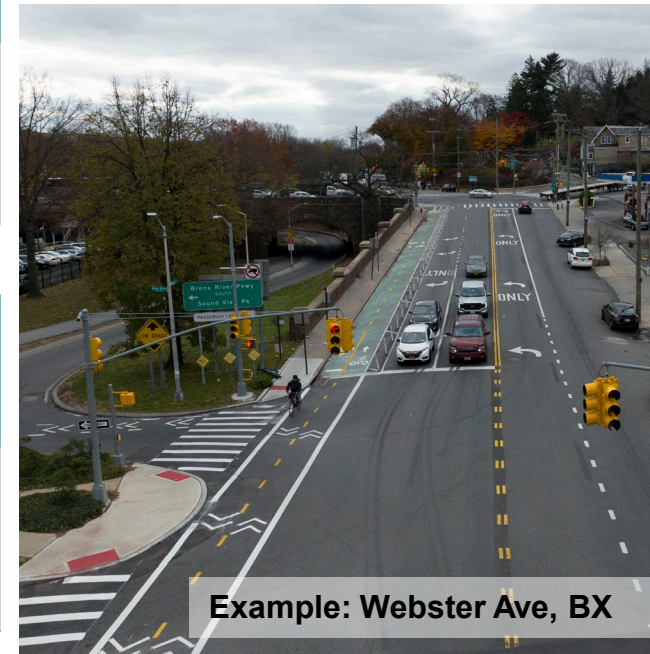
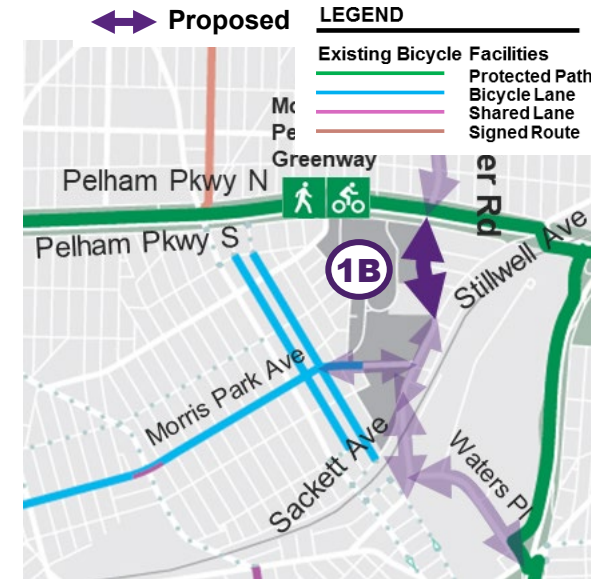
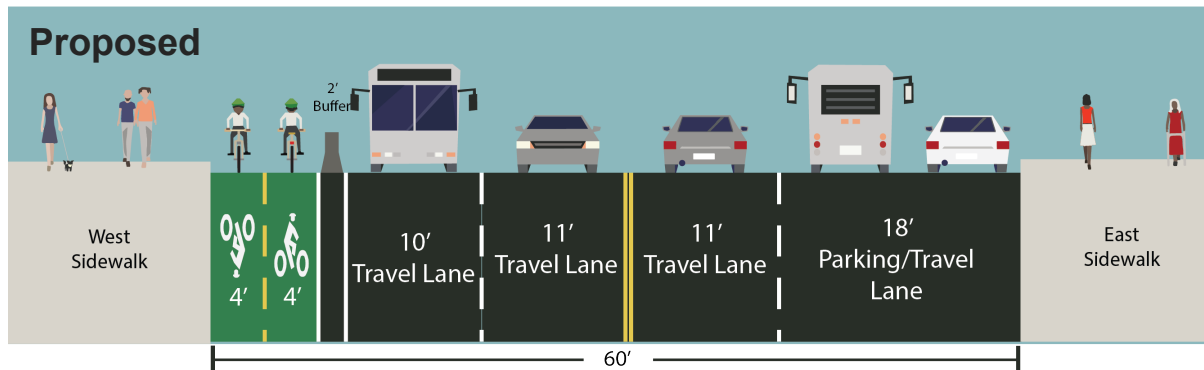
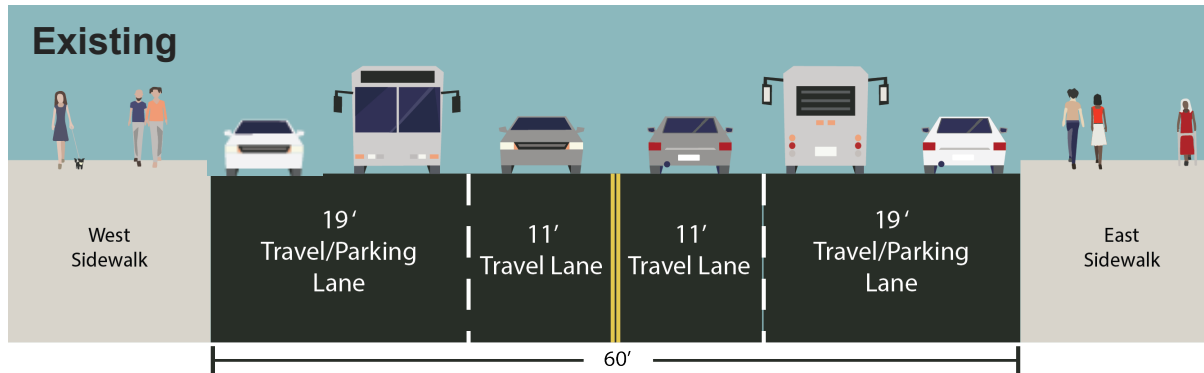
Example: MacDougal, MN

1B 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



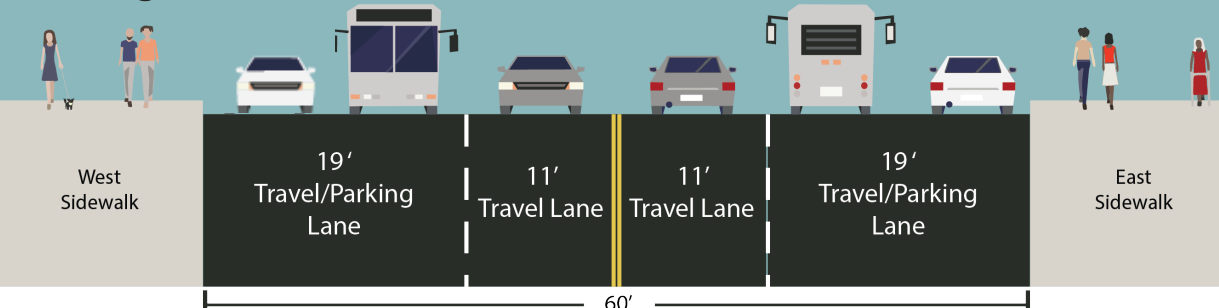
1C Eastchester Rd: Stillwell Ave – Morris Park Ave

Organize roadway markings and provide bike connections to greenway

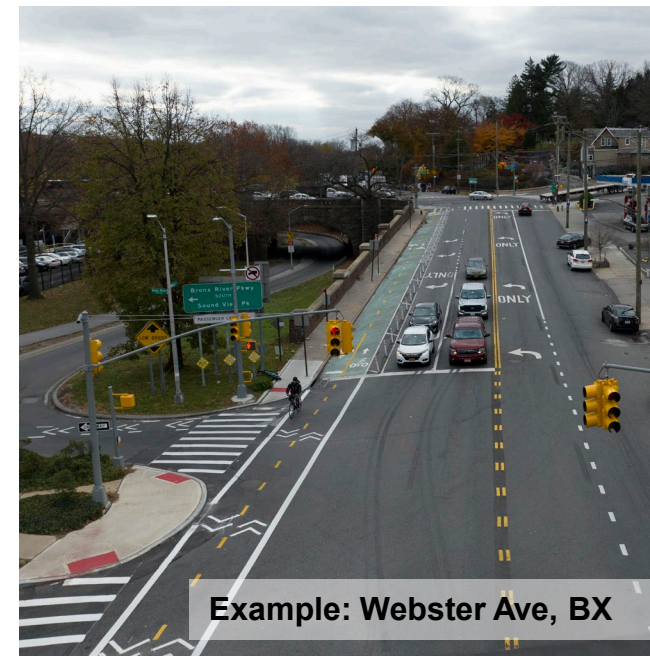
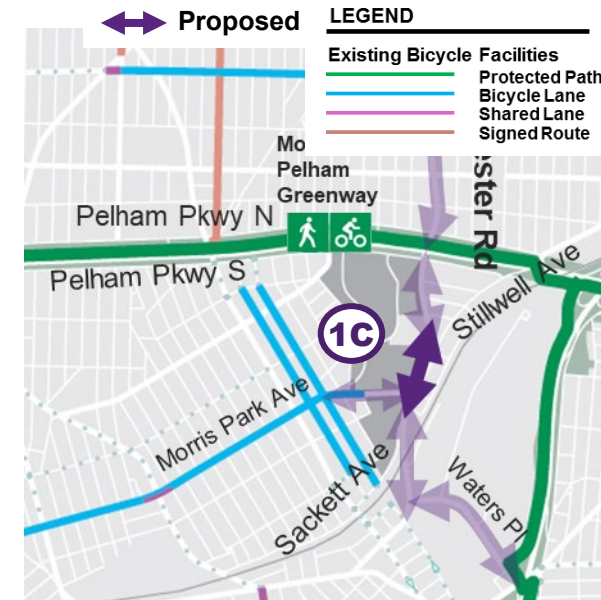
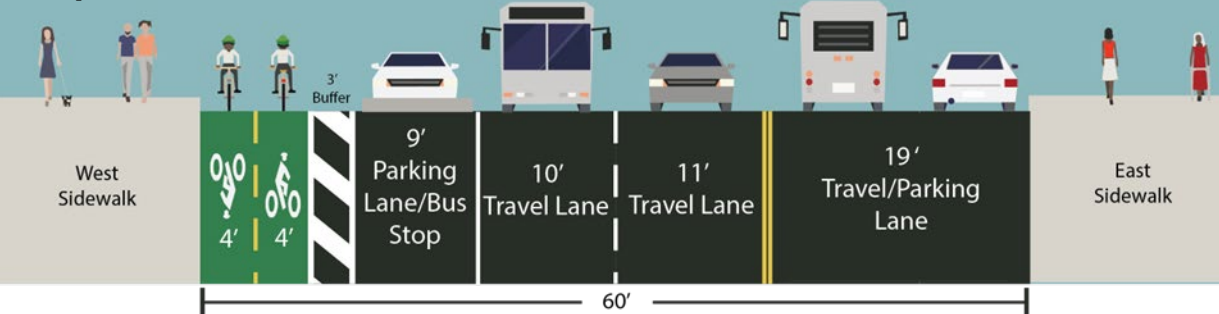
2023 Update – Protected Bike Lanes

- 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

Existing



Proposed



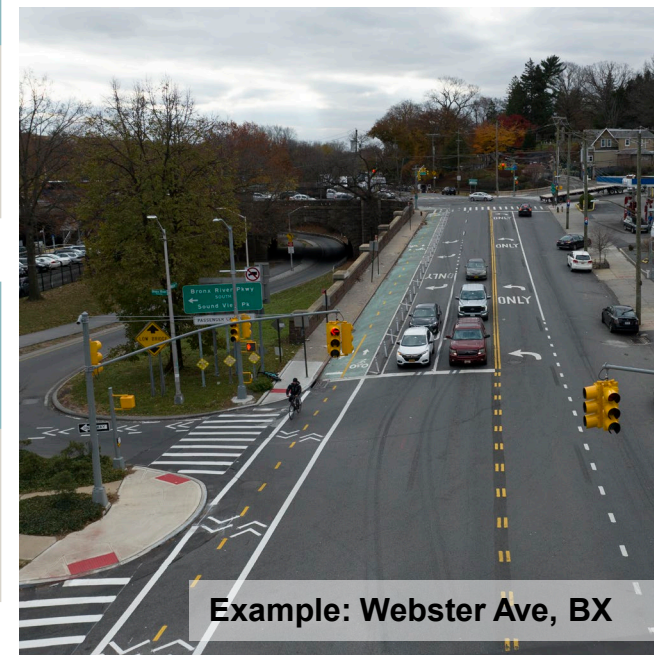
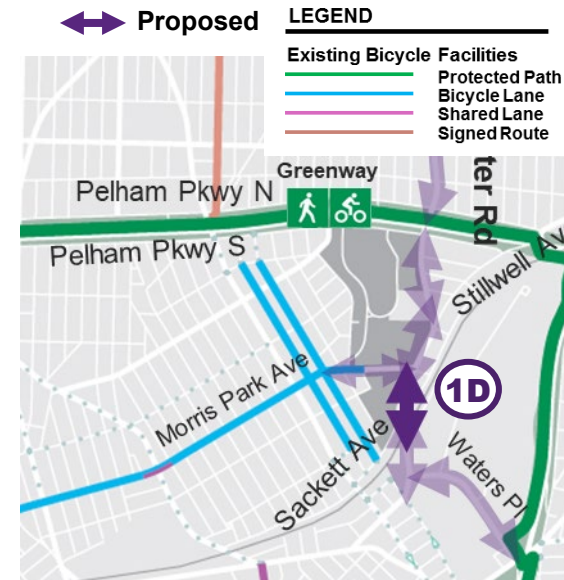
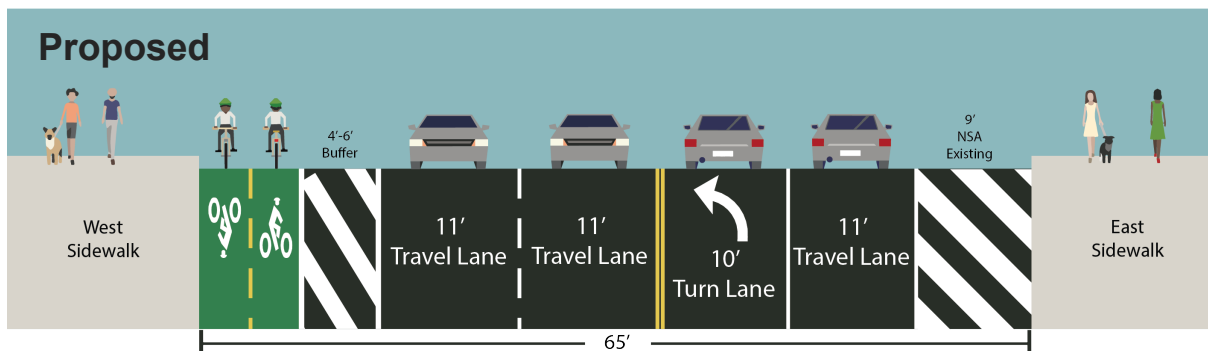
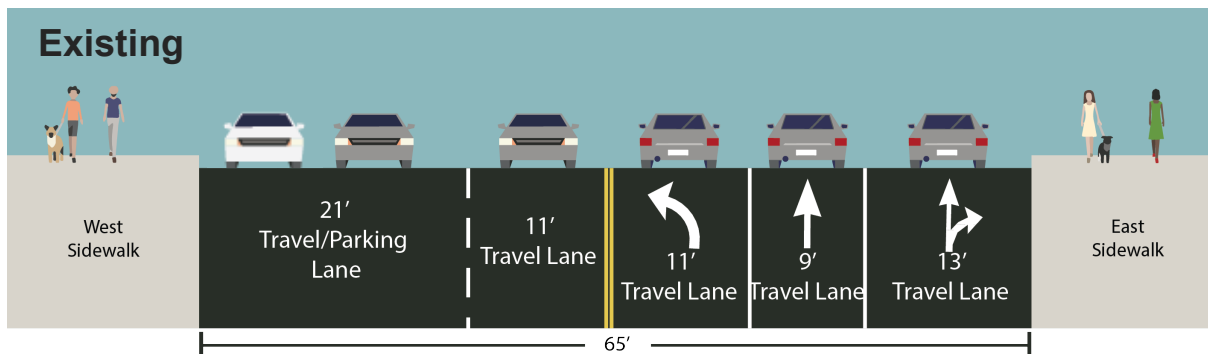
Example: Webster Ave, BX

1D 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



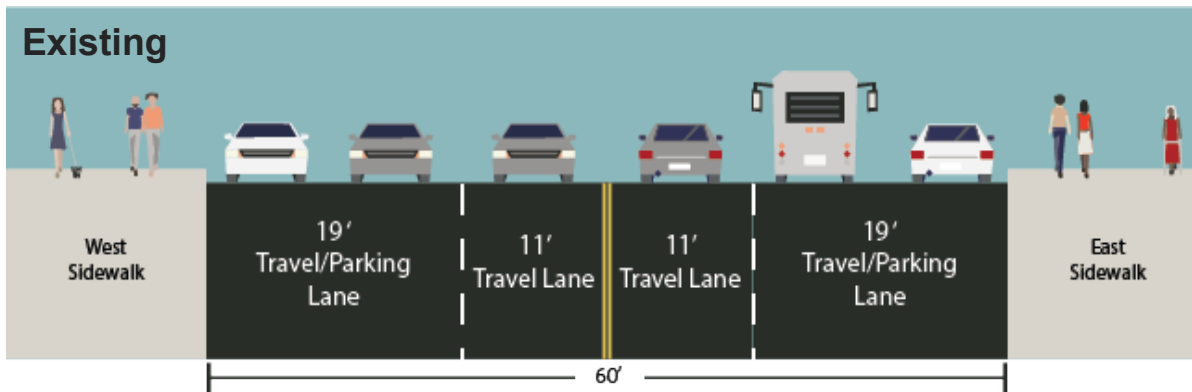
1E Eastchester Rd: Sackett Ave – Waters Pl

Organize roadway markings and provide bike connection to greenway

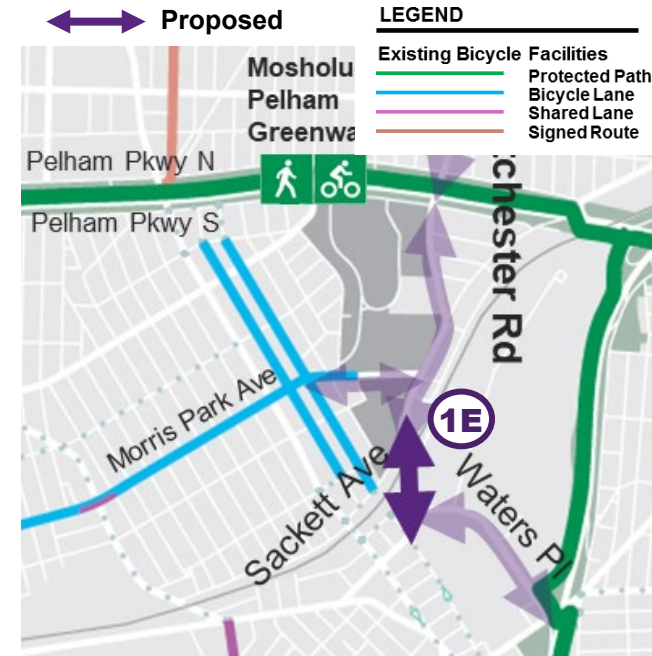
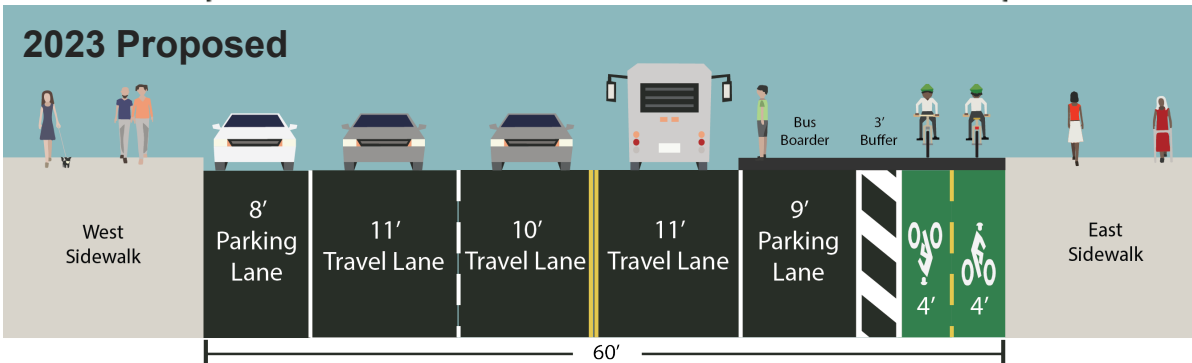
Parking Protected Bicycle Path

- 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 PI

Existing



2023 Proposed



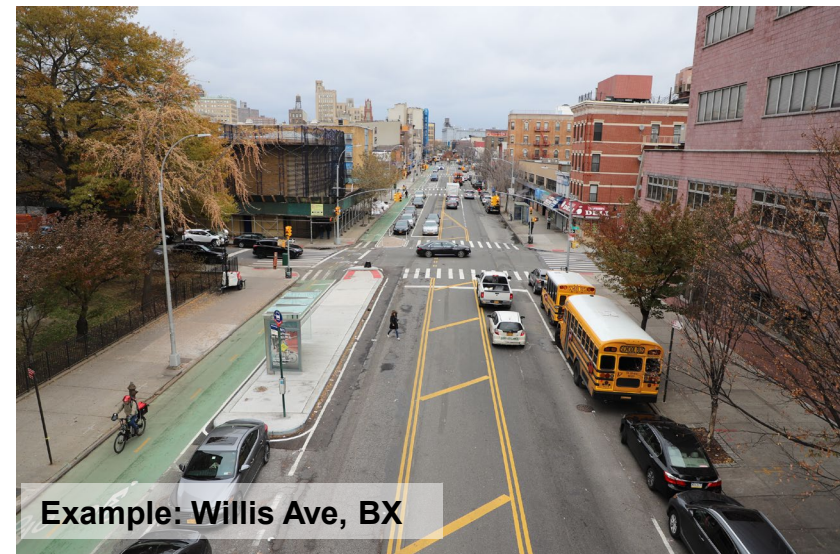
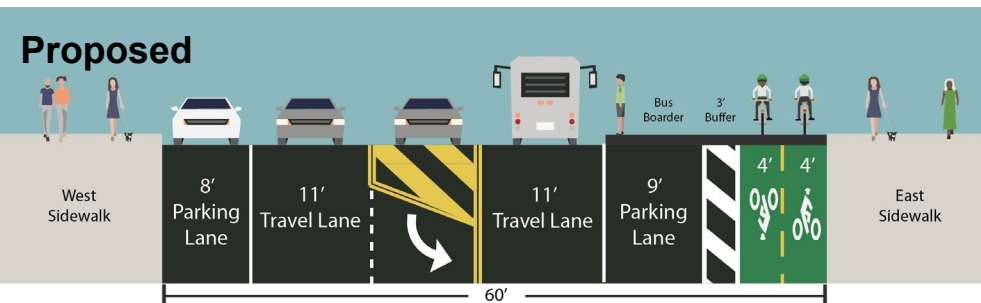
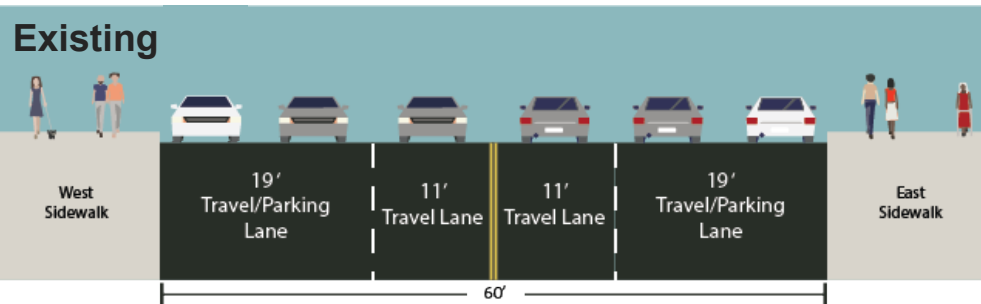
Example: Willis Ave, BX

② Water Pl: 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

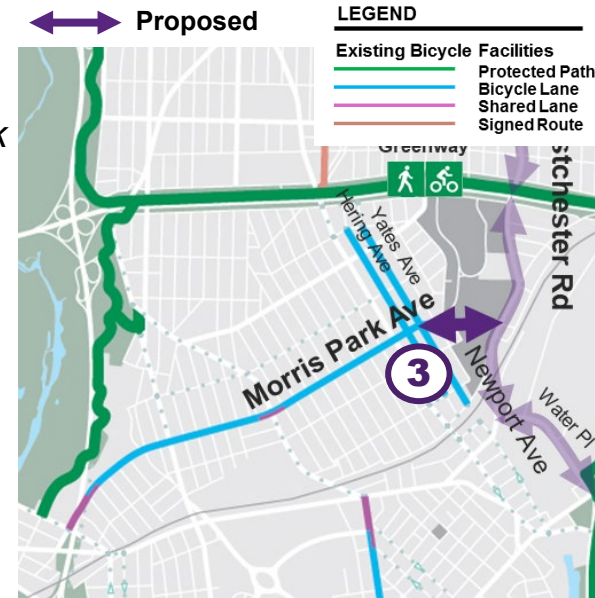
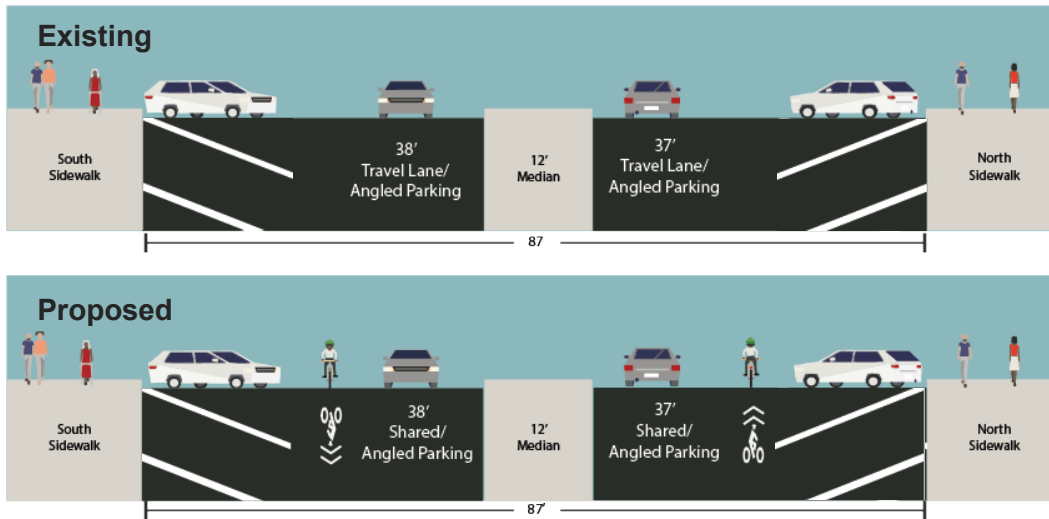


③ Morris Park Ave: Newport Ave to Eastchester Rd

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



Summary

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Overview of Street Design



Parking-Protected Bike Path



Shared Bike Lanes



Conventional Bike Lanes



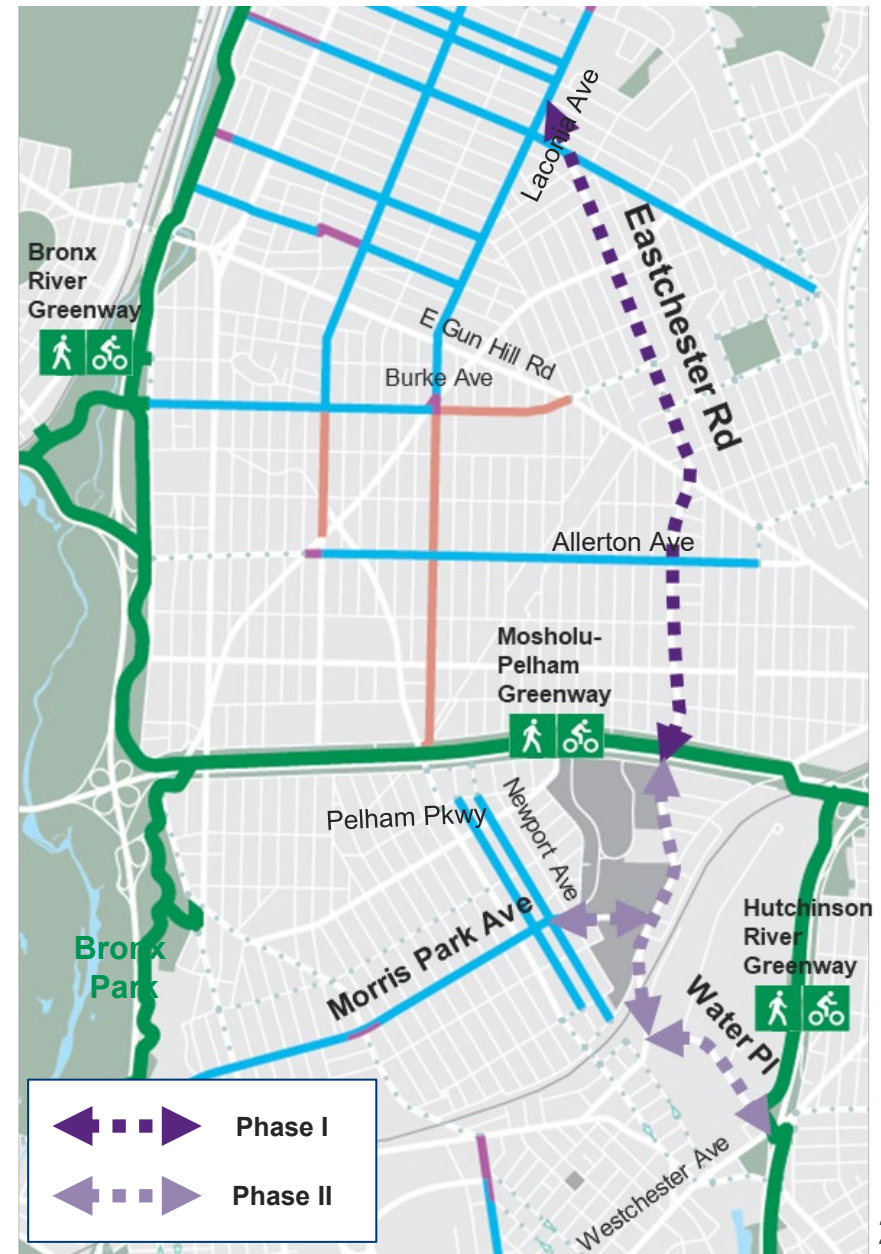
- Conventional Bike Lane
- Parking-protected Bike Lane
- Shared Bike Lane

Project Timeline

Eastchester Rd, Waters PI 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 Mosholu-Pelham Greenways
- **Phase II: 2023**
 - Protected bike lanes on Eastchester Rd between Pelham Pkwy and Water PI
 - Protected bike lanes on Water PI 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?



NYC DOT



NYC DOT



nyc_dot



NYC DOT

Appendix

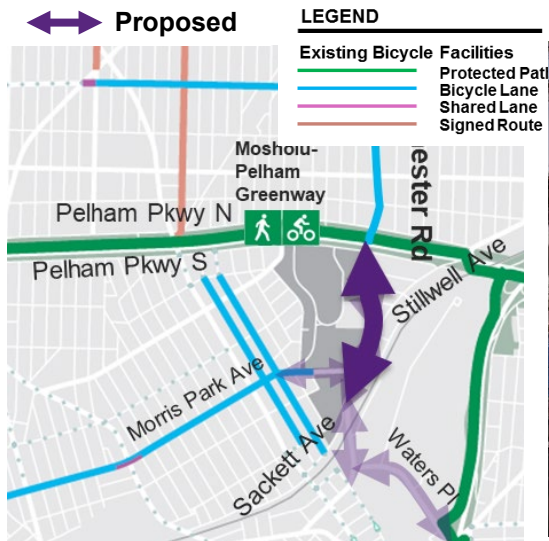
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Pelham Pkwy South – Stillwell Ave: 2023 Update



Proposed Parking Removal

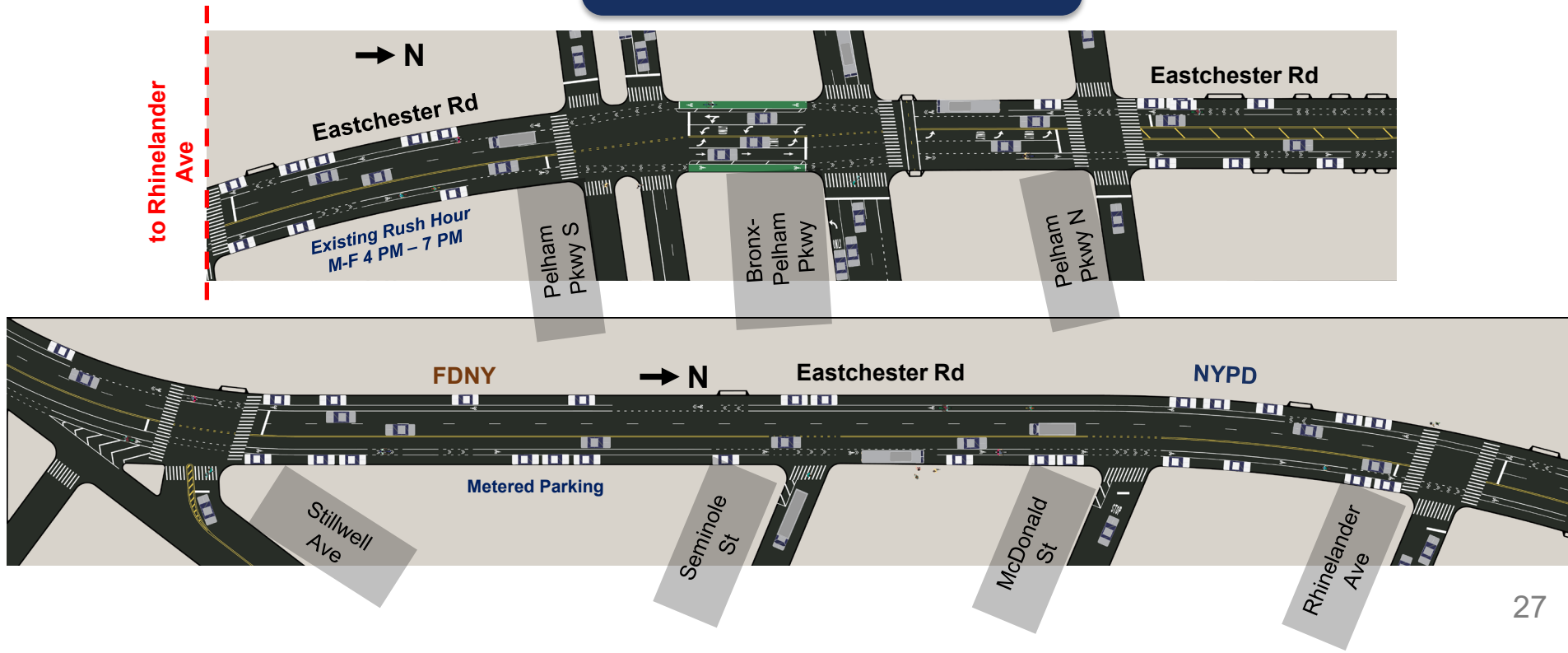
- Total removal of approximately **109** parking spaces on west curb
- Maintenance of two travel lanes for PM rush with bikes would require additional removal of 81 parking spaces between Pelham Pkwy S and Sackett Ave
- 2021 proposed removal of 28 parking spaces between Sackett and Bassett Ave for visibility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



Pelham Pkwy South – Stillwell Ave: 2021 Proposed

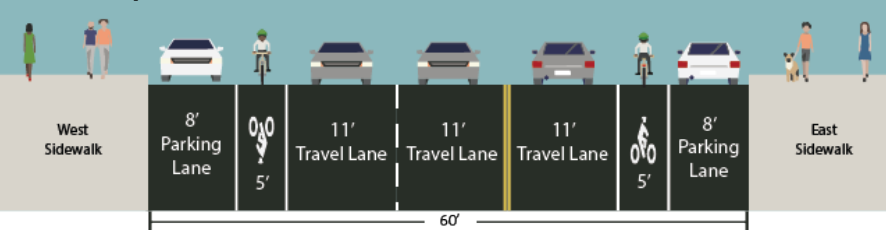


2021 proposal for full time removal of one northbound lane

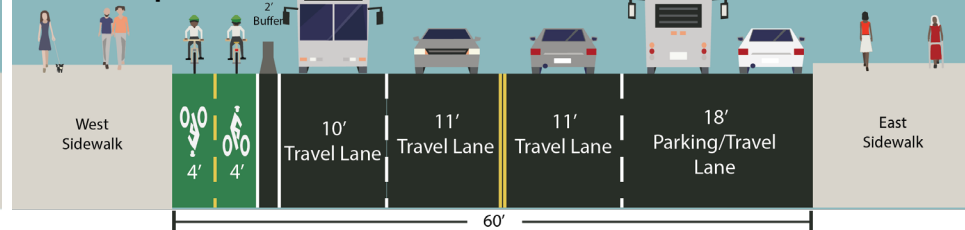


Pelham Pkwy S – Stillwell Ave: 2023 Protected Bike Path

2021 Proposed



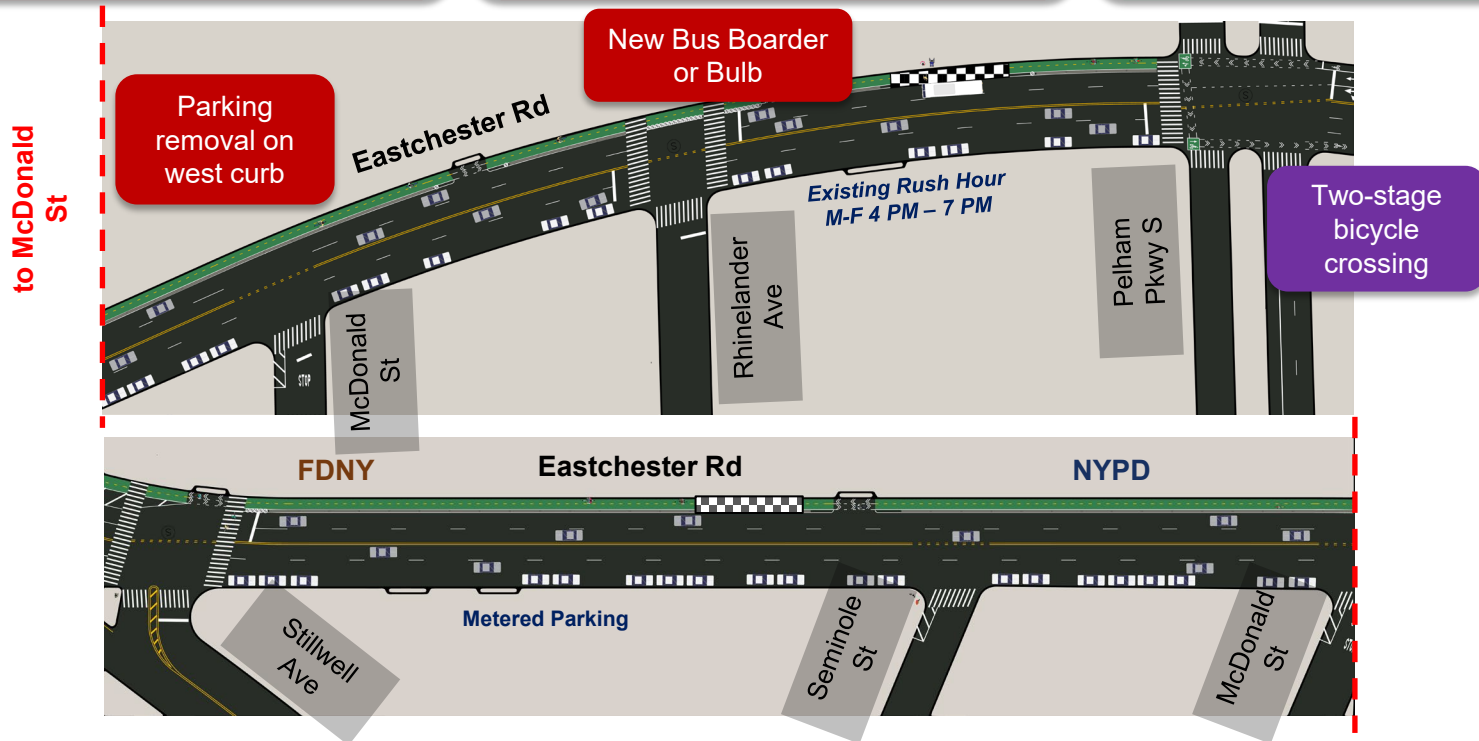
2023 Proposed



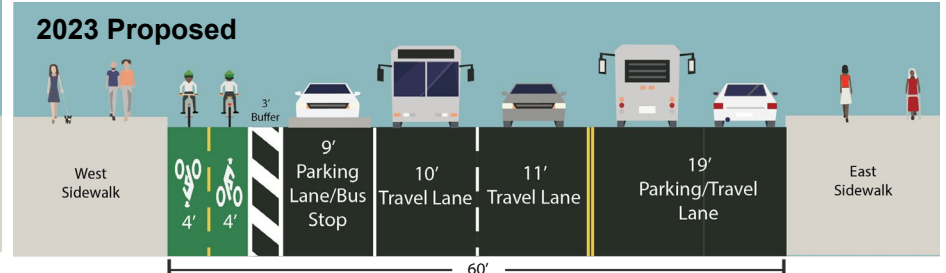
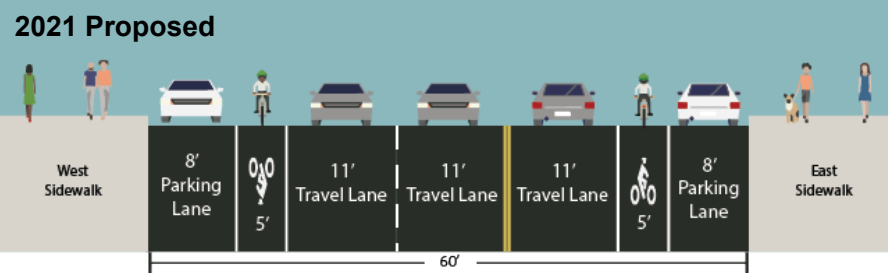
Signal and Bike Units observation of queuing/backups to Stillwell Ave for northbound approach to Pelham Pkwy S

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



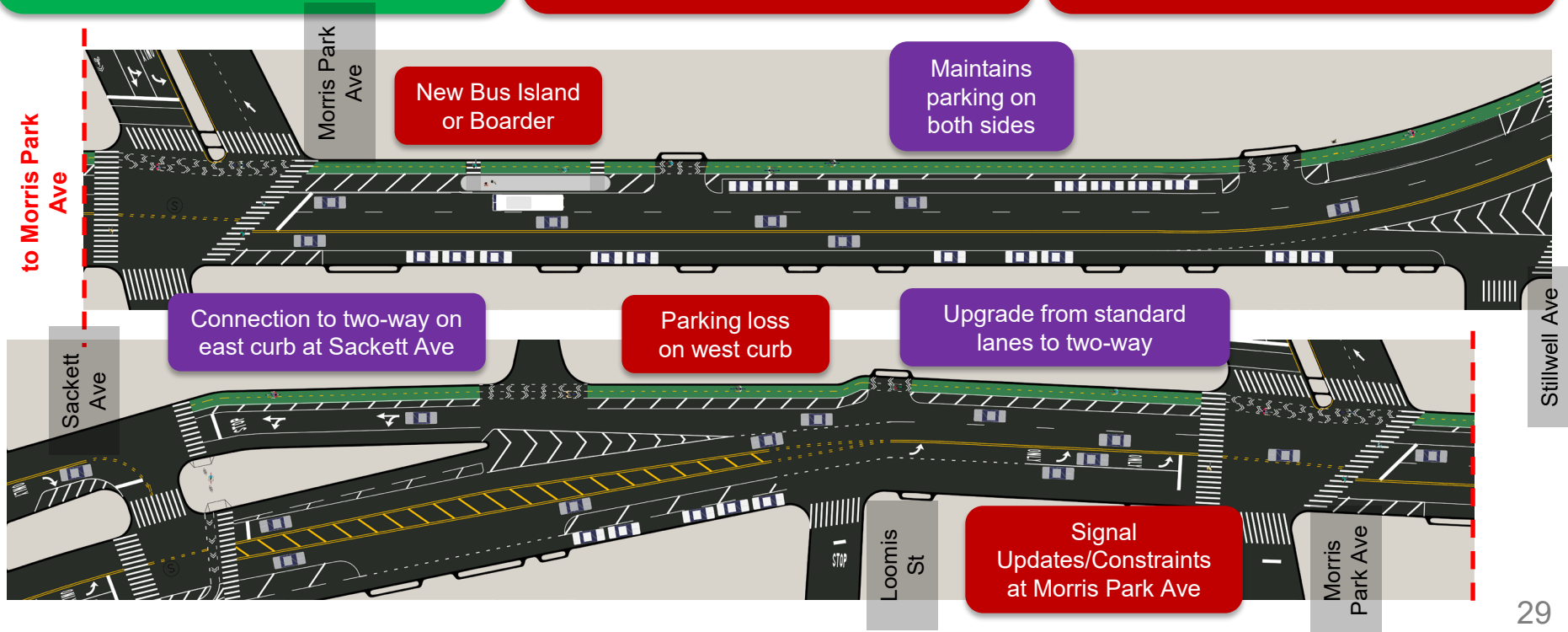
Stillwell Ave – Sackett Ave: 2023 Protected Bike Path



2021 Proposed condition
removal of northbound travel lane to be maintained

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



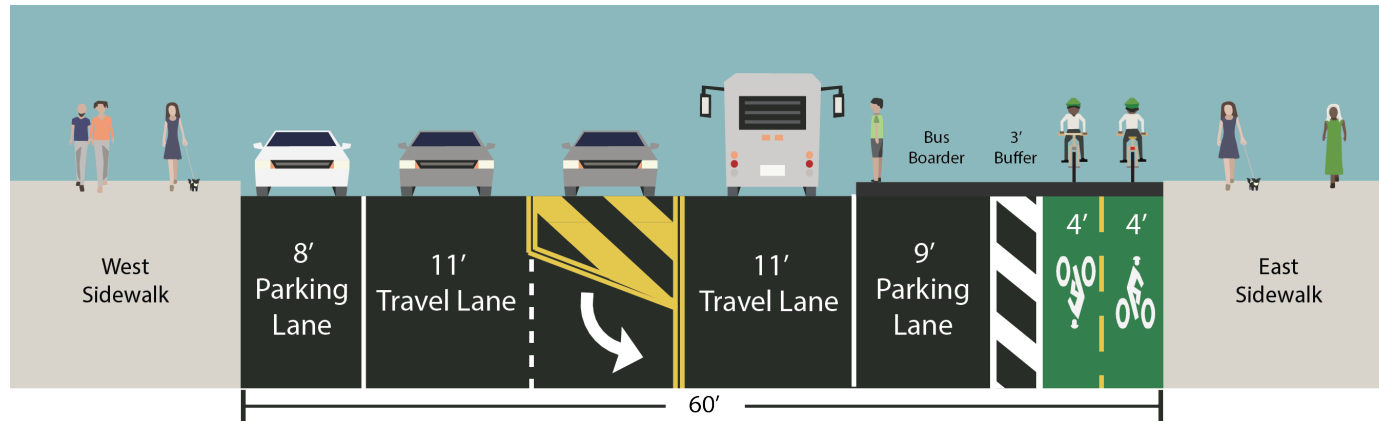
Bus Stop Interactions



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	
Rhineland 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	

