Project Location

White Plains Rd

- Project limits: White Plains Rd, between Burke Ave to E 226th St; 1.25 miles
- Corridor is under an elevated structure with columns in the roadbed
- Commercial and residential land use
- Major transit hub on White Plains Rd at E Gun Hill Rd that services 2 and 5 train with other stations located at Burke Ave, E 219th St, and E 225th St
- Bx39, BxM11, Bx41, and Bx41 SBS bus routes
- Local truck route along White Plains Rd
Safety Data

Vision Zero

- White Plains Rd is a Vision Zero Priority Corridor
- White Plains Rd and E Gun Hill Rd is a Vision Zero Priority Intersection
- White Plains Rd and E 212th St is a Vision Zero Priority Intersection
- Pedestrian fatality at E 215th St in 2019 and at E Gun Hill Rd in 2016
Safety Data

- From 2014 to 2018, there were 411 total injuries, with 113 of them involving a pedestrian.
- 23% of all pedestrian crashes involved a vehicle failing to yield to a pedestrian with the right of way.
- 24% of pedestrian crashes occurred while a pedestrian was crossing at an uncontrolled intersection.
- 16% of vehicle crashes are sideswipes due to double parking.

<table>
<thead>
<tr>
<th>Injury Summary, 2014-2018 (5 Years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Injuries</td>
</tr>
<tr>
<td>Pedestrian</td>
</tr>
<tr>
<td>Bicyclist</td>
</tr>
<tr>
<td>Motor Vehicle Occupant</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Source: Fatalities: NYCDOT, Injuries: NYSDOT KSI: Persons Killed or Severely Injured

*Map does not include total or severe injuries that occurred at midblock locations.
Data is based off of NYSDOT/NYSDMV crash and injury data available as of 3/2021.
NYC DOT Outreach

- In Winter/ Spring 2021 NYC DOT Street Ambassadors spoke to residents and 144 businesses about White Plains Rd
- Most respondents reported that they wanted better organized parking, accessible bus stops and new pedestrian crossings
- 53% of respondents often want to cross at intersections that don’t have crosswalks
- Most businesses expressed safety concerns related to double parking issues along the corridor

<table>
<thead>
<tr>
<th>Double parking frequency according to most businesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>62% (55)</td>
</tr>
<tr>
<td>Consistently</td>
</tr>
</tbody>
</table>

Street Ambassador conducting survey with Merchant
Existing Conditions

Corridor Issues

- White Plains Rd varies from 1 to 3 lanes in each direction
- Ambiguous space between column and curb

Typical Existing: E 216th St to E 226nd St
Existing Conditions

Bike Network

- E-scooter pilot in East Bronx
- Lack of North/South bike connections on a commercial corridor to existing East/West bike lanes on:
  - Burke Ave
  - E 213th St
  - E 216th St
  - E 222nd St
  - E 225th St
  - E 226th St
Existing Conditions

Double Parking/ Vehicular Conflicts

White Plains Rd and E 220th St
Existing Conditions

Visibility Issues due to columns

White Plains Rd and E 219th St
Existing Conditions

Non-ADA Compliant Bus Stops

White Plains Rd and E 222nd St
Existing Conditions

Lack of Pedestrian Crossings

White Plains Rd and E 211th St
Existing Conditions

Lack of Bicycle Facilities

White Plains Rd and E 215th St
Existing Conditions

Wide Open Roadway/ Inconsistent Lanes

White Plains Rd and E 214th St
Existing Conditions

Unregulated Parking

White Plains Rd and E 212th St
Proposal

- Reduce White Plains Rd to one lane in each direction between E Gun Hill Rd to E 216\textsuperscript{th} St
- Move curbside parking adjacent to columns
- Install protected bike lane in north/southbound directions
- Install new signals and pedestrian crossings at E 211\textsuperscript{th} St and E 215\textsuperscript{th} St
- Install concrete bus boarding islands at Magenta St, E 215\textsuperscript{th} St, and E 222\textsuperscript{nd} St
- Reorient parking and adjust regulations at select locations between E Gun Hill Rd and E 216\textsuperscript{th} St
Proposal

Protected Bike Lane

- Install curbside Protected Bike Lane from Burke Ave to E 226th St (1.25 miles; 2.5 PBL lane miles)
Proposed: Protected Bike Lanes

- Street designs that include Protected Bike Lanes (PBL) 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**

```
<table>
<thead>
<tr>
<th></th>
<th>Total Injuries</th>
<th>MV Occupant Injuries</th>
<th>Pedestrian Injuries</th>
<th>Cyclist Injuries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>1,477</td>
<td>627</td>
<td>533</td>
<td>224</td>
</tr>
<tr>
<td>After</td>
<td>1,263</td>
<td>628</td>
<td>499</td>
<td>231</td>
</tr>
</tbody>
</table>
```

Protected bike lane: 4th Ave and 7th St, BK
Proposed: Bus Stop Under the El

- Existing corridors in NYC have elevated structures with columns in the roadway and bus routes running underneath
  - Bus Stop Under the El (BSUE) program installs bus boarding islands and bus bulbs on these corridors
- Install Bus boarding islands on White Plains Rd at Magenta St, E 215th St, and E 222nd St
- White Plains Rd presents good opportunity to implement first PBL and BSUE as a combined treatment
Proposal

New Signals

- Install new signals at E 211\textsuperscript{th} St and E 215\textsuperscript{th} St
  - New signals reduce the distance between signals and discourages speeding
- Install high visibility crosswalks at E 211\textsuperscript{th} St and E 215\textsuperscript{th} St
  - New crosswalks provide safer, shorter pedestrian crossings to key transit stops along the corridor
Proposal

E Gun Hill Rd to E 213th St

Lane reduction in each direction to reduce vehicular conflicts (peak hour volume NB: 230/286 SB: 272/305)

- Proposed Protected Bike Lane
- Pedestrian space to clarify vehicular movements
- Reorganized parking under elevated structure with service road
- New signals and crosswalks with pedestrian space
- Pedestrian space to shorten crossing distances
Proposal

E 213<sup>th</sup> St to E 216<sup>th</sup> St

- Lane reduction in each direction to reduce vehicular conflicts (peak hour volume NB: 230/286 SB: 272/305)
- Proposed concrete Bus Boarding Island
- Pedestrian spaces to shorten crossing distances and calm turning vehicles
- Proposed floating parking lane and curbside Protected Bike Lane
- Proposed angled parking
- New signals and crosswalks with pedestrian spaces to create safer, shorter crossings
- Lane to accommodate merging traffic
Proposal: Parking Typical

E 220th St to E 221st St

White Plains Rd

- 30’ channelization to allow access to fire hydrant
- Protected Bike Lane turn treatments with Qwick Kurb and rubber speed humps to calm turning movements
- Wide parking lane stripe to allow for vehicles to navigate around columns
Proposal: Concrete Bus Boarding Island

E 222nd St

Wide parking lane stripe to allow vehicles to navigate around columns

Proposed concrete Bus Boarding Island

Proposed pedestrian space

White Plains Rd
Proposal: Bus Bulb

E 219th St

White Plains Rd

- Bike stamps on existing concrete bus bulb to guide cyclist
- Ramp for cyclists
- 30’ channelization to allow access to fire hydrant
Proposal: Burke Ave to E Gun Hill Rd Cross Section

Existing

- West Sidewalk
  - Parking Lane 15’
  - Moving Lane 11’
  - Moving Lane 11’
  - Parking Lane 15’

- Width between curb to column is approximately 15’

Proposed

- West Sidewalk
  - Bike Lane 5’
  - Parking Lane 11’
  - Moving Lane 11’
  - Moving Lane 11’
  - Parking Lane 15’

- Mark wide parking lane with narrow buffer to accommodate bike lane
Proposal: Offset Crossing

Rosewood St

Mark wide parking lane stripe to allow vehicles to navigate around columns

Protected Bike Lane turn treatments with rubber speed humps to calm turning movements

Bus Stop at Rosewood St to be removed as part of Bronx MTA Redesign Plan

Channelization to provide access to driveway

Pedestrian space to shorten crossing distances and normalize intersection
Proposal: BSUE and Pedestrian Space

Magenta St

Inadequate space for parking behind column requires channelizing space

White Plains Rd

Channelization to provide access driveway

To restrict eastbound right turn for trucks to accommodate concrete Bus Boarding Island

Proposed concrete bus boarding island

Mark wide parking lane stripe to allow vehicles to navigate around columns

nyc.gov/visionzero
Parking and Curb Management

- On the 1.25 mile corridor each location was evaluated to determine if parking is feasible
- To implement additional metered parking on White Plains Rd between E 212th St to E 214th St to encourage turnover for commercial access

<table>
<thead>
<tr>
<th>Design Change</th>
<th>Parking Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protected Bike Lane Design Treatments (daylighting, turn treatments, etc.)</td>
<td>- 82 spots</td>
</tr>
<tr>
<td>Bus Stop Under the El treatments</td>
<td>- 17 spots</td>
</tr>
<tr>
<td>Parking Additions (Angled Parking and design treatments)</td>
<td>+ 12 spots</td>
</tr>
<tr>
<td>Total Change</td>
<td>Net Loss of 87 spots* (Total loss of 35 Metered and 52 ASP)</td>
</tr>
</tbody>
</table>

* Estimates may change based on design modifications
Loading

• Investigate loading zones where loading activity is highest where supermarkets and retail stores are located:
  • Fine Fair Supermarket between E Gun Hill Rd & E 213th St
  • Western Beef between E 214th St and E 215th St
  • Food Marketplace on E 225th St
• Delivery activity is highest on the weekdays between 9 AM – 11AM and 11 AM – 3 PM, where roughly half of all businesses reported receiving deliveries within those times
Project Benefits

- Reduces vehicle conflicts under the elevated structure
- Clarifies traffic movements
- Reduces speeding
- New signal installations provide crosswalks to create safer, shorter pedestrian crossings
- Provides safe, accessible bus stops
- Opportunity to provide protected bike lanes and expand bike network

Similar Configuration: 4th Ave, Brooklyn
Thank You!
Proposal: Alternate Routes

**Magenta St**

- Eastbound right turn ban at Magenta St and White Plains Rd requires trucks to utilize the following alternative route:
  - Option 1: Eastbound right turn onto Bartholdi St to access Magenta St via Holland Ave
  - Option 2: Eastbound right turn onto E Gun Hill Rd to access Magenta St via Holland Ave