138TH ST
MADISON AV BRIDGE TO 3RD AV

Presentation to Bronx Community Board 1
Municipal Services Committee
March 13, 2017
Background
• 138th St is a Bronx Vision Zero Priority Corridor

• 365 injuries in 5 years, including 10 severe injuries (2010-2014)
  • 36 injuries to pedestrians (3 severe)
  • 6 injuries to bicyclists (2 severe)

• Significant pedestrian and bicycle connections to transit and bike routes
• Community requests to improve pedestrian and bicycle safety at E 138 St / Major Deegan

• Issues identified by community members on Vision Zero map:
  • Failure to yield
  • Speeding
  • Not enough time to cross
  • Long crossing distances

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**Speeding**

![Speeding](image)

Drivers speeding to get on the highway don't yield to bikes and peds.

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**Failure to Yield**

![Failure to Yield](image)

Drivers turning onto the highway do not yield to pedestrians. Most dangerous intersection I have encountered in my sixteen years of living in NYC.

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• Reduced vehicle delay by redistributing signal time to eastbound and southbound movements
• Eliminated turning conflicts that resulted in 11 crashes between 2010 and 2014
• Diversion signage routing vehicles via NB Gerard Av, Grand Concourse flyover, and EB 138th St
• Traffic patterns remained similar, except for increase in westbound right at Gerard Av
Existing Conditions
EXISTING ISSUES

E 138 St & Exterior St

Aggressive Turns
EXISTING ISSUES

E 138 St & Gerard Av

Double Turns
EXISTING ISSUES

E 138 St & Gerard Av

Soft turns encourage failure to yield to pedestrians and cyclists
Existing crossings do not follow pedestrian desire paths.
EXISTING ISSUES

E 138 St & Grand Concourse

Missing Pedestrian Crossings
EXISTING ISSUES

E 138 St & Park Av

Poor Bicycle Connections
• 138th St is a critical cross-Bronx and Bronx-Manhattan connection
• Existing 138th St bicycle lanes stop at 3rd Av
• Walton and Gerard Av bike lanes have no connection at 138th St
• ~50 cyclists in each direction during peak hours
• 138th St expands from 2 lanes to 4 lanes in each direction between 3 Av and the Madison Av Bridge, creating disorganized traffic patterns and underutilized roadway space.
2017 Proposal
Proposed Improvements:
1) Major Deegan Expressway
2) Grand Concourse
3) Park Av
4) Park Av to 3 Av
Existing Conditions – 138 St & Major Deegan

- Existing crossings do not follow pedestrian desire paths
- Insufficient crossing time for pedestrians
- Lack of bike lanes
- Aggressive double turning
- Excess roadway space
- Confusing traffic movements and congestion

Map showing existing conditions at 138 St & Major Deegan with traffic volumes and pedestrian crossing data.
Proposal – 138 St & Major Deegan

- Provide direct pedestrian crossings to and from bridge
- Provide exclusive crossing time for pedestrians
- Expand bridge landing areas in paint
- Add sidewalk extensions in concrete
Proposal – 138 St & Major Deegan

- Provide direct bike crossings to and from bridge
- Add protected/buffered bike lanes
- Add exclusive crossing time for bikes
Proposal – 138 St & Major Deegan

- Provide right turn bays and turn signals
- Remove vehicle conflicts to and from bridge service roads. Impacts 1-7 cars per hour
- Improve markings to better organize traffic
- Improve signal timing to reduce congestion and better process traffic flow
- Increase westbound right green time by 5 seconds during peak hours
- Add loading zone on west side of Exterior St

Remove vehicle conflicts to and from bridge service roads. Impacts 1-7 cars per hour.
Existing 138 St at Exterior St

Excess Space
Proposal
138 St at Exterior St

- Wider sidewalks
- Direct pedestrian and bike crossings
- Protected bike lanes
- Calmer, more controlled turns
- Clarified traffic movements
- Improved traffic flow
Existing Conditions – 138 St & Grand Concourse

Long crossing distances

No traffic control or crosswalks across Grand Concourse NB intersection between bus stop and subway entrances

Illegal parking in loop road blocks access to Finca del Sur farm
Add concrete pedestrian islands to provide refuge

Close loop road by Finca del Sur Farm to create pedestrian space and ease garden access

Signalize intersection at Grand Concourse NB and provide crosswalks

Add painted curb extensions

Add curbside bike lanes
Existing
138 St at Grand Concourse
Proposal
138 St at Exterior St

- Increased pedestrian space
- Direct pedestrian crossings
- Bike lanes
- Improved garden access
- Maintained traffic capacity
Existing Conditions – 138 St & Park Av

No crosswalk on west leg of intersection

Wide roadway on northbound Park Av encourages aggressive driving and double turns
Add crosswalk on west leg of intersection

Add pedestrian island to provide refuge and calm traffic

Add curbside bike lanes

Add northbound left turn lane to separate from turns from pedestrians crossing and ease traffic flow

Add eastbound merge to improve traffic flow
Cross Section – Park Av to 3 Av

**Existing**

- North Sidewalk
- 18’ Travel + Parking Lane
- 11’ Travel Lane
- 11’ Travel Lane
- 18’ Travel + Parking Lane
- South Sidewalk

**Proposed**

- North Sidewalk
- 8’ Parking Lane
- 10’ Travel Lane
- 10’ Travel Lane
- 11’ Travel Lane
- 8’ Parking Lane
- South Sidewalk

**Traffic Volumes**

**AM Peak**
- EB: 640
- WB: 795

**PM Peak**
- EB: 560
- WB: 1035

**Excess roadway capacity in eastbound direction**

- **Maintain two westbound lanes**
- **Reduce to one eastbound lane**
- **Add standard bike lanes in both directions**
- **Increase green time for east-west traffic to improve flow**
Restrict eastbound left turn onto northbound Rider Av to maintain traffic flow.
Impacts ~60 vehicles in peak hours. Park Av or 3 Av are alternate routes.

Add eastbound left turn bay at 3 Av

Second eastbound lane acts as de facto left turn lane
Project Benefits

- Improves safety for all roadway users
- Widens sidewalks
- Shortens crossing distances for pedestrians
- Provides direct pedestrian and bike crossings
- Completes missing connection in bike network
- Calms aggressive driving, particular turns
- Clarifies traffic movements and improves vehicular flow
- Maintains traffic capacity
THANK YOU

Questions?

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