Hempstead Avenue Safety Enhancements

Presentation to Queens Community Board 13 Transportation Committee

June 16, 2022
Hempstead Avenue

Presentation Overview

• Background

• Existing Conditions

• Project Proposal

• Next Steps

Pedestrian mid-block crossing on Hempstead Avenue near 218th Street
Background
Background

Planning Framework

• Freight Mobility Unit is committed to strategies outlined in it’s strategic plan: *Delivering New York: A Smart Truck Management Plan for NYC*

  • **Safety**: improve the safety of truck travel at intersections and along corridors
  • **Sustainability**: foster the sustainable and environmentally responsible movement of goods
  • **Freight Efficiency**: Improve the efficiency of freight movement to, from, and within NYC
  • **Partnerships & Knowledge**: Grow public and private partnerships to increase knowledge about freight

• DOT is focusing on improving 1,000 intersections to improve safety for all road users

• The Freight unit aims to address truck priority safety corridors; streets where there is a concentration of truck involved crashes with vulnerable road users (pedestrians and cyclists)
Freight Mobility Unit Overview

Freight Toolkit

**What We Do:** Reduce the impacts of trucks on communities and infrastructure while improving the sustainability and efficiency of truck deliveries

**How We Do it:** Wide range of strategies, policies and programs in our toolbox
Background

Project Scope and Motivation

- Hempstead Avenue v is a Vision Zero corridor; between 2015 and 2019 there have been approximately 12 killed or severely injured pedestrians, cyclists, and motorists per mile.
- The corridor is a major through truck route that connects Nassau County to New York City.
- Hempstead Avenue is a pedestrian priority corridor; there are multiple deficiencies (i.e. long crossings).
- Accessibility to green space along 225th Street is limited.
- Existing condition of concrete medians pose multiple safety concerns.
Background

Project Location – Previous Safety Enhancements

2016-2017
- LPI added at 217th Lane
- Left turn traffic calming installed on Springfield Boulevard at Hempstead Avenue
- Crosswalk markings upgraded to high visibility corridor-wide on Hempstead Avenue

2018-2019
- Concrete neckdowns built at NW/SE corners on Springfield Boulevard at Hempstead Avenue
- Signal added at 225th Street and 103rd Avenue
- One-way conversion of 103rd Avenue near 225th Street
- Remaining crosswalk markings upgraded to high visibility on Hempstead Avenue

2021-2022
- Signal added at Hempstead Avenue and CIP northbound off-ramp
- Signal and new crosswalk added at Hempstead Avenue and 218th Street
- Bus bulb installed near 225th Street (south curb)
- Crosswalks added near CIP off-ramp area
- New pedestrian ramps installed at 222nd Street (NE/NW corners)
- LPIs implemented at 218th Street and 221st Street
- Intersection control study (for signal installation) opened at Hempstead Avenue and 98th Avenue

A new signal and crosswalk was installed on Hempstead Avenue at 218th Street in 2021

LPI = leading pedestrian interval
CIP = Cross Island Pkwy
Existing Conditions
Crash History
2014-2019 (5 Year Summary)

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Severe injuries document at 98th Avenue, 217th Street, 217th Place, 217th Lane and 218th Street

Overview of crash locations on Hempstead Avenue (Jamaica Avenue to 218th Street)
## Crash History
### 2014-2019 (5 Year Summary)

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Severe injuries document at Springfield Boulevard, 220th Street, 221st Street and 225th Street

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Overview of crash locations on Hempstead Avenue (Springfield Boulevard to 225th Street)
Hempstead Avenue – Existing Conditions
Jamaica Avenue to 217th Street

Illegal turns out of gas station

Long ped crossing and awkward geometry for turns

Midblock U-turns

Long ped crossing and substandard ped island

Missing crosswalk
Hempstead Avenue – Existing Conditions

217th Place and 218th Street

Substandard flat medians are often driven over by vehicle.

Substandard concrete median

Left turns over median create safety issues
Hempstead Avenue – Existing Conditions

Springfield Boulevard to 220th Street

Complex intersection

Substandard concrete median

Left turns over median create safety issues

Left turns over median create safety issues

Midblock crossing outside of crosswalk
Hempstead Avenue – Existing Conditions

225th Street/ Cross Island Parkway Area

- No dedicated left turn lane
- Limited protection for pedestrians crossing
- Sidewalk not ADA accessible
- Illegal right turns on to Cross Island Pkwy on-ramp
- Queue spillback from 225th Street to Hempstead Avenue
- Missing lane and crosswalk markings
- Congestion from right turns
Existing Conditions
Hempstead Avenue Corridor

Not ADA accessible
Substandard medians
Long crossings
Missing lane markings
Existing Conditions

Peak Hour Traffic Count (PM Peak)

- Volumes are highest within the project area during the PM peak (4:45-5:45 PM, with 2465 vehicles at 225th Street intersection)
- Conflict between eastbound right (right on red after stop permitted) and westbound left (green left turn arrow) turns with existing conditions
- Around 5% of all vehicles passing through the intersection during peak periods are trucks
- Many vehicles passing through the intersection are accessing the Cross Island Parkway (73%)
Project Proposal
Proposed Safety Improvements

Hempstead Avenue and 225th Street

- Pedestrian refuge island
- Lane organization with new markings
- Sidewalk expansion
- Add left and right turn bays to accommodate high volumes of turning vehicles
Proposed Safety Improvements
225th Street and 103rd Avenue

- Install lane markings
- Add crosswalk markings
- Signal timing changes
- Build out existing median in concrete (partly to be filled in with grass) – coordinate with Parks
- Sidewalk expansion
- Turn restriction enforcement by design
Proposed Safety Improvements

Hempstead Avenue and 217th Street

Concrete island reconstruction

Crosswalk implementation

Ped space build-out/shorten crossing
Proposed Safety Improvements
Hempstead Avenue and 98th Avenue

- Shorten pedestrian crossing
- Prevention of illegal U-turns
- Signalization study open
- Right turn ban from Hempstead Av to 98th AV
Project Benefits Summary

Improving Corridor Safety

• Shorten crossing distances for pedestrians

• Provide pedestrian refuge space

• Improve accessibility

• Mitigate illegal turns by design

• Upgrade existing medians to standard

Reflective of the proposed condition for Hempstead Avenue at 225th Street (E 144th Street and Grand Concourse, Bronx)

Reflective of the proposed condition for 98th Avenue at Hempstead Avenue (South Williamsburg, Brooklyn)
Next Steps
Next Steps

Timeline

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**Summer/Fall 2022:** Planned implementation (likely in phases)

**Winter 2022/23:** Post-implementation monitoring

### Safety
- Promote safety for all road users via street design

### Communication
- Follow-up and address issues and/or concerns identified by local stakeholders

### Continued Monitoring
- Continue to monitor conditions on Hempstead Avenue following implementation of safety enhancements

Hempstead Avenue and 98th Avenue
Thank You!

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Questions?