Metropolitan Ave at Union Turnpike

CB 6 Transportation Committee

April 27, 2023
Project Background

- Frequent community requests for analysis, including in 2018 and 2022
- Jackie Robinson Parkway entry and exit points
- Residential neighborhood: Forest Hills and Kew Gardens
- Forest Park access route
## Safety Data

Metropolitan Ave and Union Turnpike
Injury summary. 2016-2020 (5 years)

<table>
<thead>
<tr>
<th></th>
<th>Total Injuries</th>
<th>Severe Injuries</th>
<th>Fatalities</th>
<th>KSI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedestrian</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Bicyclists</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Motor Vehicle Occupant</td>
<td>67</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>72</strong></td>
<td><strong>4</strong></td>
<td><strong>0</strong></td>
<td><strong>4</strong></td>
</tr>
</tbody>
</table>

KSI: Persons Killed or Severely Injured

3 pedestrian injuries since 2016

72 total injuries since 2016
Existing Conditions
Existing Conditions
Existing Conditions

Missing Pedestrian Features

- Missing ramps and sidewalks
Existing Conditions

Long Crossing Distances

- Long crossing distances with no pedestrian refuge
Existing Conditions
Right Turns and Pedestrian Conflicts

1. Soft right turns from Union Turnpike southbound to Metropolitan Ave westbound conflict with pedestrians in west crosswalk:

   ![Diagram showing soft right turns from Union Turnpike to Metropolitan Ave]

   **Phase B – 14 Sec**
   **Phase C – 25 Sec**

2. High vehicle volumes from Metropolitan Ave to Union Turnpike conflict with pedestrians in north crosswalk:

   ![Diagram showing high vehicle volumes from Metropolitan Ave to Union Turnpike]

   **Phase A – 38 Sec**

   Red / held traffic  ○○○ Free flow (not part of signalized intersection)  Green/traffic flow  ○○○ Ped Walk
Existing Conditions

Left Turns and Pedestrian conflicts

Left turns from Metropolitan onto Union Turnpike are misaligned, have high volumes, and conflict with pedestrians.
Existing Conditions

Entry Ramp Conflicts

• Left turning vehicles have a long, straight approach to crosswalk
• Straight approach causes vehicles to accelerate into crosswalk
Existing Conditions

Unclear Vehicular Turns, Redundant Slip Lanes

1. Turns onto 75 Rd are unpredictable with which slip they turn through
2. Creates problem for pedestrian visibility and conflict in the crossing
3. 75 Rd is a low volume road
Existing Conditions

Mid-intersection merge

- AM Rush hour no parking, all other hours parking allowed
- Two lanes westbound on Metropolitan merge into one lane causing mid-intersection congestion
Proposed Design
Toolkit

Concrete
Traffic Regulations
Curb Regulations
Street Markings
Signals
Lane Assignments
Martello Bollards
Slip Closure
Proposal
Proposal – left turn lane adjustments

Add lane assignment for left turn lane

Realign current left turn lane to allow both lefts to maneuver without conflict

Reduces conflict between left turn lanes
Proposal – pedestrian refuge islands

- Calmed vehicular turns
- New S-turn onto ramp
- Protected refuge area in crosswalk
- Existing turn
- Proposed turn
- Median tip extension
Proposal – slip lane closures

- Right turn ban onto 75 Rd for trucks from Union Turnpike and Metropolitan

- Unnecessary roadbed reallocated to pedestrian uses
- Clarifies vehicular movement
Proposal – new sidewalk connection

Improves pedestrian network

Formalize path and convert to a sidewalk connection
Proposal – shortened crosswalk

Total Crossing Distance (North): 126’

Total Crossing Distance (South): 70’
Proposal – parking regulations

Removes merge from intersection

7 parking spots converted
Current: No Standing 7am-9am Monday-Friday
Proposed: No Standing Anytime

No Standing Anytime on North curb
DEP and DOT Work
Benefits

Improves pedestrian network

Provides safer, shorter pedestrian crossings

Calms vehicle turns

Improves traffic flow

Reduces conflict between vehicles and pedestrians
Thank You!

Questions?