Pulaski Bridge
Pedestrian and Bicycle Improvements

Commissioner Janette Sadik-Khan, New York City Department of Transportation
Presented December 17th, 2013
Background

- Critical bike network link:
  - Connects Brooklyn to Ed Koch Queensboro Bridge
  - Connects rapidly redeveloping Queens and Brooklyn waterfronts
  - Important connection to the 7 train for pedestrians and bicyclists
- Community concerns about bicycle-pedestrian path in 2009
- Enhancements installed to improve safety and organize traffic flow

### Pulaski Bridge Weekday Bicycle/Pedestrian Counts
7-11am & 2-7pm

<table>
<thead>
<tr>
<th>Mode</th>
<th>April 2009</th>
<th>April 2013</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bicyclists</td>
<td>487</td>
<td>1,004</td>
<td>+106%</td>
</tr>
<tr>
<td>Pedestrians</td>
<td>1,077</td>
<td>1,586</td>
<td>+47%</td>
</tr>
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</table>
• Path width makes passing difficult, especially as volume increases

• Community request for bicycle and pedestrian enhancements

• Support from AM Joseph Lentol, CM Stephen Levin, CM Jimmy Van Bramer, Transportation Alternatives and Queens CB2

• April 2013: DOT consultant begins design of a new bicycle path

• August 2013: Transportation Enhancement Program (TEP) grant application submitted
Existing Conditions: Shared Path

- 8.5 ft-wide two-way shared bicycle/pedestrian path
- Path narrows at obstacles
- Average two-way weekday volumes, 7am-7pm, April 2013:
  - 1,845 pedestrians
  - 1,194 bicyclists
Existing Conditions: Roadway

- 3 Queens-bound (northbound) and 3 Brooklyn-bound (southbound) travel lanes
- All travel lanes are 11 ft wide
- Peak hour traffic volumes:
  - 1,559 vehicles (Brooklyn-bound, 4:30-5:30pm)
  - 1,556 vehicles (Queens-bound, 8-9am)
- 2 receiving lanes on McGuiness Blvd, Brooklyn
- Complex multi-nodal intersection at Queens landing
Project Challenges

- Bridge approaches have slip lanes
- Electrical lines in existing barrier
- Moveable bridge: opens for maritime traffic
  - Newtown Creek is an active waterway, approx. 500 openings/year
  - Moveable structure must be kept in balance
- Bridge deck makes barrier attachment challenging
- Funding constraints
Alternatives Considered

- On-street bicycle lanes in the direction of travel
  - Vehicle speeds too high
  - Heavy truck traffic
  - Sight line issues due to vertical and horizontal alignment
  - Off-ramps at Queens-bound approach hostile to cycling

- Two-way bike path on east (Queens-bound) side of bridge
  - Off-ramps at Queens-bound approach hostile to cycling
  - Access issues in Brooklyn

- Expanding bridge width
  - Cost prohibitive

- Free-standing pedestrian/bicycle bridge between Manhattan Ave and Vernon Blvd
  - Cost prohibitive
Proposed Condition

- Remove a Brooklyn-bound vehicle travel lane
- Install a bicycle path on the west side of the bridge next to the existing shared path
- Install barriers protecting the new bicycle path
- Convert the existing shared path to a pedestrian-only path
Proposed Condition
Changes to Roadway Configuration

- **Brooklyn**: No operational change as the existing 3 Brooklyn-bound lanes currently merge to 2 lanes approaching McGuiness Blvd and Green St.

- **Queens**: Vehicles entering the bridge from the slip ramp at Jackson Ave and 49th Ave will merge, yield to traffic entering from 11th St and southwest-bound Jackson Ave.
Traffic Analysis

• A traffic analysis was conducted to assess the effect of removing one Brooklyn-bound lane

• Peak hour Brooklyn-bound traffic volume (1,559 vehicles) can easily be accommodated by 2 travel lanes

• Traffic signal phasing allows yielding vehicles to merge easily

• No traffic impacts expected to result from this project
Project Benefits

- Doubles space dedicated to bicyclists and pedestrians
- Enhances safety by separating bicyclists and pedestrians
- Facilitates transit trips; eases congestion on the B62 bus
- Enhances transportation network resiliency in event of emergencies (e.g. Hurricane Sandy, blackout) by increasing bicycle/pedestrian capacity
Estimated project cost:

- $3.46 million
- 91% materials and labor
- 9% planning and design
Next Steps

- Implementation via NYCDOT Bridge Component Rehabilitation contract
- Anticipated implementation 2014