Williamsburg Bridge Access Improvements

PRESENTATION OVERVIEW

- **Background**
  - Growth in Cycling
  - L Train Shutdown
  - Neighborhood Connectivity
  - Proposal Overview

- **Williamsburg Bridge Approach**
  - S 5th St, S 5th Pl, S 4th St, Borinquen Pl

- **Scholes St, Meserole St Connections**
  - S 3rd St, Scholes St, S 4th St, Meserole St

- **Summary**
Background
Recent Travel Trends (2010-2015)

+370,000 New York City residents

+520,000 new jobs

+20% growth in tourists

+10% growth in subway trips

+80% growth in daily cycling trips

Biking provides an efficient and affordable transportation option for a growing city

83% increase in bike commuting in Brooklyn 2010-2015

An average of 7,580 cyclists used the Williamsburg Bridge every day in 2016 - an increase of 13% compared to 5 years ago
GROWTH IN CYCLING – L Train Shutdown

Substantial increase in bike ridership on Williamsburg Bridge expected with closure of L line

- During Hurricane Sandy, bike volumes on Manhattan Bridge increased 200-300%

- During the 2005 transit strike, bike volumes on the East River bridges more than quadrupled

Biking will provide a convenient alternative to transit for regular L train riders
Background

NEIGHBORHOOD CONNECTIVITY

Williamsburg Bridge structure, elevated Brooklyn-Queens Expressway and their associated ramps divide neighborhoods.
PROPOSAL OVERVIEW

- **Williamsburg Bridge Access**
  Bike Access and Pedestrian Safety Improvements on S 4th St, Borinquen Pl, S 5th Pl, and S 5th St

- **Scholes St / Meserole St Connections**
  New Bike Lanes on S 3rd St, Scholes St, S 4th St, and Meserole St
Williamsburg Bridge Access
PROPOSED IMPROVEMENTS

1. Intersection Safety Improvements at S 4th Pl, Havemeyer St and Borinquen Pl
2. Two-way Protected Bike Lane on S 5th Pl and S 4th St
3. Eastbound Bike Connection on Borinquen Pl Median
4. Parking Protected Bike Lane on S 5th St
Intersection Safety Improvements at S 4th St, Havemeyer St and Borinquen Pl

EXISTING CONDITIONS

Challenging intersection disconnects neighborhoods
- No pedestrian crossings at S 4th St and bridge entrance
- No direct connection for bikes from Williamsburg Bridge to Borinquen Pl/Grand St
- Double parking in existing bike lane
- Difficult to cross Borinquen Pl due to heavy right turn
Interaction Safety Improvements at S 4th St, Havemeyer St and Borinquen Pl

EXISTING CONDITIONS
Williamsburg Bridge Approach

Intersection Safety Improvements at S 4th St, Havemeyer St and Borinquen Pl

PROPOSED IMPROVEMENTS

New signalized crossings at S 4th St and bridge entrance and signal timing changes at Havemeyer St create seamless pedestrian and bike connection through intersection

- New concrete pedestrian island, expanded refuge island and median
- Double right turn from Havemeyer St to Borinquen Pl on separate phase from pedestrian crossing
- Requires loss of 4 parking spaces during the PM peak, Monday to Friday, 2-7pm.
EXISTING CONDITIONS

Two-way Protected Bike Lane on S 5th Pl and S 4th St

Existing routes to bridge challenging, indirect
- Route to bridge requires challenging left turn from S 4th St to S 5th Pl and uses shared sidewalk on S 5th Pl resulting in
  - high bike volumes that conflict with pedestrians
  - high incidence of contraflow biking
- No eastbound connection on S 4th St to Borinquen Pl/Grand St, indirect route via Roebling St and S 3rd St
Two-way protected bike lane on S 5th Pl and S 4th St

**PROPOSED IMPROVEMENTS**

- Two-way protected path creates safe, direct connection to/from bridge, accommodates high bike volumes
- Parking protected on S 5th Pl
- Jersey barrier protected / parking protected on S 4th St
- Reduces turning conflicts and bike-pedestrian conflicts
- Improved signal timing at S 4th St and Roebling St
- Requires loss of 2 parking spaces and left turn on S 4th St
**EXISTING CONDITIONS**

Existing route on S 3rd St is indirect and has an uncontrolled crossing at Borinquen Pl
- Indirect route leads to contraflow biking
- Proposed two-way protected bike lane on S 4th St would end at Havemeyer St and Borinquen Pl
- Illegal parking along median disrupts neighborhood continuity, impairs pedestrian and bike movements
Neighborhood Access for Pedestrians

- Challenging intersection at S 4th St, Havemeyer St, Borinquen Pl
- No crossing at vehicular entrance to the bridge
- Difficult crossing Borinquen Pl due to heavy right turn
- Long Term Illegal Parking Along Median
- Disrupts neighborhood continuity, impairing bike movements

Bike Route From Bridge
- No eastbound connection on S 4th St to Borinquen Pl/Grand St
- Cyclists contra flow on S 4th St and bike down busy Borinquen Pl
- Uncontrolled crossing at S 3rd St

PROPOSED IMPROVEMENTS

3 Eastbound Bike Connection on Borinquen Pl Median

New eastbound bike path along Borinquen Pl median creates safe, direct connection from bridge and S 4th St to Borinquen Pl/Grand St
- Eliminates illegal parking along median
- Opportunity to reimagine public space
Williamsburg Bridge Approach

3

Potential for DOT Art on Borinquen Pl Median
**EXISTING CONDITIONS**

- **Neighborhood Access for Pedestrians**
  - Challenging intersection at S 4th St, Havemeyer St, Borinquen Pl
  - No crossing at vehicular entrance to the bridge
  - Difficult crossing Borinquen Pl due to heavy right turn
  - Long Term Illegal Parking Along Median
  - Disrupts neighborhood continuity, impairing pedestrian & bike movements

**PROPOSED IMPROVEMENTS**

- **Buffered Bike Lane**
  - Unprotected connection from Kent Ave, Wythe Ave, Berry St
  - Desired connection to Driggs Ave

- Install Parking Protected Bicycle Lanes + Direct, Contra Flow Connection to Driggs Ave
  - Upgrade existing buffered bike lane
  - Narrower moving lanes calm traffic
  - Desired connection to Driggs Ave
  - Safety improvements require loss of 11 parking spaces

- **Williamsburg Bridge Approach**
  - Parking protected bike lane creates stronger western connection to and from bridge path
  - Parking protected eastbound lane connects Berry St to bridge path
  - Parking protected two-way path connects bridge path to Driggs St
  - Requires the loss of 3 parking spaces
Scholes St, Meserole St
Connections
PROPOSED IMPROVEMENTS

1. Eastbound Bike Lane on S 3rd St and Scholes St
2. Westbound Bike Lane on Meserole St and S 4th St

Scholes St, Meserole St Connections
**EXISTING CONDITIONS**

- **Borinquen Pl to Leonard St**
  - 3rd St and Scholes St
  - Scholes St, Meserole St Connections

**PROPOSED IMPROVEMENTS**

- **Borinquen Pl to Leonard St**
  - Eastbound Bike Lane on 3rd St and Scholes St
  - **Benefits**
    - Narrower moving lanes calm traffic
    - Desired connection to Bushwick
    - No impact on capacity or parking

- **Leonard St to Bushwick Ave**
  - Bike lanes create new connection from bridge to East Williamsburg and Bushwick
  - **Benefits**
    - Organize roadway, calm traffic
    - Provide dedicated space for cyclists
    - No impact on capacity or parking
Shared lanes and bike lanes create from East Williamsburg and Bushwick to bridge

- Organize roadway, calm traffic
- Provide dedicated space for cyclists where feasible
- No impact on capacity or parking

**Morgan Ave to Bushwick Pl**

**EXISTING CONDITIONS**

- North Sidewalk
- Combined Travel / Parking Lane: 34’
- South Sidewalk

**PROPOSED IMPROVEMENTS**

- North Sidewalk
- 34’
- South Sidewalk

**Bushwick Pl to Borinquen Pl**

**EXISTING CONDITIONS**

- North Sidewalk
- Combined Travel / Parking Lane: 30’ - 32’
- South Sidewalk

**PROPOSED IMPROVEMENTS**

- North Sidewalk
- 7½’ - 8’ Parking Lane
- 10’ Travel Lane
- 5’
- 7½’ - 9’ Parking Lane
- South Sidewalk

- 30’ - 32’
Scholes St, Meserole St Connections

**2 Westbound Bike Lane on S 4th St**

**EXISTING CONDITIONS**

**PROPOSED IMPROVEMENTS**

Connection to Borinquen Pl
- Use wide sidewalk on south side of Borinquen Pl to access signalized intersection and cross to westbound bike lane
- Discourages contraflow riding
- Requires the removal of 1 parking space

Bike Stamps
Grand Street
- A plan will be submitted this year once input from workshops is synthesized
- Will be part of a larger roll out of L train mitigation

EXISTING CONDITIONS – Grand St

- South Sidewalk: 9’ Parking Lane, 5’ Travel Lane, 11’ Travel Lane, 5’ Parking Lane, 9’ Parking Lane
- North Sidewalk: 50’
Summary
Summary

BENEFITS OF DESIGN ELEMENTS

Roadway markings
Vehicles
- Organize the roadway
- Improves safety
- Improve alignment, and visibility
- Establish standard width; discourage speeding

Cyclists
- Dedicated space for cyclists
- Increase predictability of cyclists location
- Direct connections to existing network
- Provide wayfinding

Refuge islands, painted neck downs, and high visibility crosswalks
- Creates shorter, safer pedestrian crossings
- Creates new pedestrian crossings
- Improves alignment at intersections
- Discourage drivers from encroaching into crosswalk
Questions?

THANK YOU!