9TH STREET
STREET SAFETY UPGRADES

Community Board 6 Transportation Committee
May 17, 2023
Background
9th Street Safety Upgrades

Project Area Location

- Industrial and residential land use
- B61 bus route
- Critical connection between Park Slope and Gowanus and Red Hook
- 35 feet wide roadway
Background

- **9th Street Bicycle Facilities**
  - 2nd Ave – 3rd Ave: Shared Lanes
    - Installed 2009
  - 2nd Ave – Hamilton Ave: Bike Lanes
    - Installed 2009
  - 3rd Ave – Prospect Park West: Protected Bike Lanes
    - Installed 2018
    - Followed pedestrian fatalities and updates to PBL tool kit

- 9th Street intersects nearby bicycle lanes on 4th Ave, 3rd Ave, and Smith St

- LPIs installed at on 9th St at 2nd Ave and 8th Ave in Jan 2023

- Gowanus and 4th Ave redevelopment and impending Hamilton Ave greenway (BWG) may lead to higher bike volumes
Issues Mid-Block Unprotected Bike Lanes

- West of 4th Ave, 9th St is typically 35’ wide
- Smith St – 2nd Ave: Two existing moving lanes and two existing curbside bike lanes
- 2nd Ave – 3rd Ave: Two existing moving lanes with shared bike lane markings and two existing parking lanes
9th Street Safety Upgrades

Issues Intersection Safety

• West of 4th Ave, turn lanes on 9th St reduce space available for bicycle infrastructure

• Truck routes on 9th Street, Smith St, 3rd Ave, 4th Ave heighten the necessity of safe bike infrastructure on the corridor
Issues Addressing Curb Access

- 9th St between 2nd Ave and 3rd Ave is a mix of industrial, commercial, and residential uses
- Industrial uses have many driveways, particularly on south side of 9th St
- Reports of frequent double parking despite nearby parking lots
- Current parking regulations are No Parking 8am-6pm but are routinely disregarded
- Frequent sidewalk parking
Issues Community Concerns

April 2023 Community Meeting:

• Presented Design Tool Kit and draft principles of 9th Street redesign

• Listened to requests brought by community:
  • Preference for Jersey barriers
  • Poor pavement conditions
  • Signal wanted at Lowe’s driveway
  • Loading zones on avenues
  • Bus stop boarding islands
  • LPIs (pedestrian head-starts)
  • Physical deflections for drivers (chicanes and speed bumps)
Safety
Project Area Safety

9th Street – 3rd Avenue to Smith Street
Crash History 2016-2020

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<th>Total Injuries</th>
<th>Severe Injuries</th>
<th>Fatalities</th>
<th>KSI</th>
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- 7.1 Killed or Severely Injured (KSI) per mile puts the corridor in the middle 33% of dangerous corridors in Brooklyn
- Fatality of a cyclist in January 2023 underscores need for continuously-protected bike facilities
Safety Benefits of Protected Bike Lanes

Protected bike lanes benefit all street users:

Crashes with Injuries: Down 15%
Motor Vehicle Occupant Injuries: Down 15%
Pedestrian Injuries: Down 21%

Injuries to cyclists increase only 3%, despite a 61% increase in bike volume increase.

Protected Bike Lanes
Before and After Crash Data, 2007 - 2017

Data from 25 separate protected bicycle lane projects installed from 2007-2014 with 3 years of after data. Includes portions of 1 Ave, 2 Ave, 8 Ave, 9 Ave, Broadway, Columbus Ave, Hudson St, Lafayette St / 4 Ave, Sands St, Allen/Pike St, Kent Ave, Prospect Park West, Flushing Ave, Bruckner Blvd & Longfellow Ave, Imlay St / Conover St, Paerdegat Ave. Only sections of projects that included protected bike lanes were analyzed.
Source: NYPD AIS/TAMS Crash Database
Green Wave

Analysis of fatalities key factors (2014-Present):
- 60% of fatalities happened at intersections; 23% involved a vehicle turn; 16% involved a driver’s failure to yield the right of way
- Nearly 90% of fatalities happened on streets without bike lanes

Citywide Protected Bicycle Lane (PBL) Network
- Build 30 miles of protected bicycle lane annually, guided by a PBL vision document.

Better Design:
- Implement new design standards based on national & international best practices to enhance safety at intersections.
- Continue piloting new designs with rigorous safety analysis

Education and Outreach:
- Launch next phase of Vision Zero public awareness campaign, educating drivers with a focus on cyclist safety — and expand the “Get There” bicycle encouragement/rules of the road campaign
- Educate all street users about safe truck operation on city streets
- Increase helmet giveaways and helmet use encouragement.
Safe Streets for Cycling

Protected Bike Lanes
- 34% reduction in risk of injury
- On the highest-risk streets, cycling risk or injury is reduced by over 60%

Standard Bike Lanes
- 32% reduction in risk of injury
- Improved safety on all study projects

Shared Lanes
- 18% reduction in risk of injury across all projects
- Limited use (wayfinding, as part of bike blvds, or on very narrow/low volume streets)*

Potential Design
**9th Street Safety Upgrades**

**9th Street, Smith St to 3rd Avenue Potential Roadway Design**

**Existing: Smith St – 2nd Ave**

- 6’ Travel Lane
- 11.5’ Travel Lane
- 6’

35’

**Existing: 2nd Ave – 3rd Ave**

- 7’ Parking Lane
- 10.5’ Travel Lane
- 10.5’ Travel Lane
- 7’ Parking Lane

35’

**Potential: Smith St – 3rd Ave**

- 4.5’ Travel Lane
- 11’ Travel Lane
- 11’ Travel Lane
- 4.5’

35’

**Advantages**

- Barrier-protected lane provides dedicated space for bikes
- Barriers deters vehicles from blocking bike lane
9th Street Safety Upgrades

9th Street, Smith St to 3rd Avenue Potential Roadway Design

Existing

Potential Configuration: Grand St, Brooklyn

Disadvantages
- Loss of 14 parking spaces
- Bike lane protection must end at bus stops
- Narrow bike lane requires special maintenance arrangements with DSNY
- Narrow bike lane impedes passing
- Conflicts remain at driveways
9th Street Safety Upgrades

9th Street, Smith St to 3rd Avenue Potential Roadway Design

Intersections

Existing

Disadvantages

- Lack of turn lanes will increase traffic delay and lengthen queues
- May require left turn bans
- Could create back pressure on turning vehicles may encourage riskier turns

Advantages

- Removing existing left turn lanes allows space to maintain bike lane
- Extends protected, dedicated space for cyclists at approach to intersections between Smith St and 3rd Ave

Potential
9th Street, 5th Ave to 8th Ave Bike Corrals

- Bike corrals will be installed on existing 9th Street pedestrian islands at 5th Ave, 6th Ave, 7th Ave, and 8th Ave
- Protects island from illegal parking to maintain visibility between people biking, walking, and driving

Proposed Design: Crescent St at Broadway, Queens
Questions?

THANK YOU!