

# 4<sup>th</sup> Avenue - Park Slope

## Corridor Safety Improvements

2013



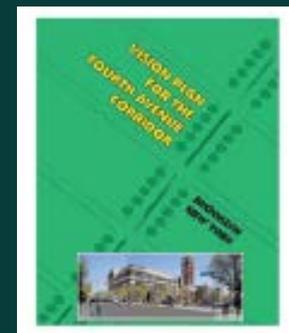
# Project History and Goals

## Project History

- 2009: NYPD/CB7 safety requests to DOT
- 2010: Borough President's report
- 2011: 4<sup>th</sup> Ave Task Force, CB10 report
- 2012: Phase 1: Sunset Park (15<sup>th</sup>-65<sup>th</sup> Sts)
- **2013**: Outreach to Bay Ridge, **Park Slope**

## Goals of project:

- Identify street safety concerns
- Develop street design solutions
- Create safer crossings
- Improve safety for all road users



# Extensive Public Input

- Workshop Publicity: Borough President, 4<sup>th</sup> Ave Task Force, Forth on Fourth Ave
- Multilingual outreach (Spanish)
- Over 450 comments received on project website, [nyc.gov/4thAve](http://nyc.gov/4thAve):



**TALLER DE PROYECCIÓN DE LA SEGURIDAD DE LA 4<sup>TH</sup> AVENUE**

Está invitado a un taller público para discutir el futuro de la 4<sup>th</sup> Avenue entre la 15<sup>th</sup> Street y Pacific Street en Park Slope

**Patrocinadores:** NYCDOT, Brooklyn Borough President Marty Markowitz y el grupo de trabajo de la 4th Avenue

**Fecha:** martes, 12 de febrero de 2013

**Hora:** de 7:00 a 9:00 p. m.

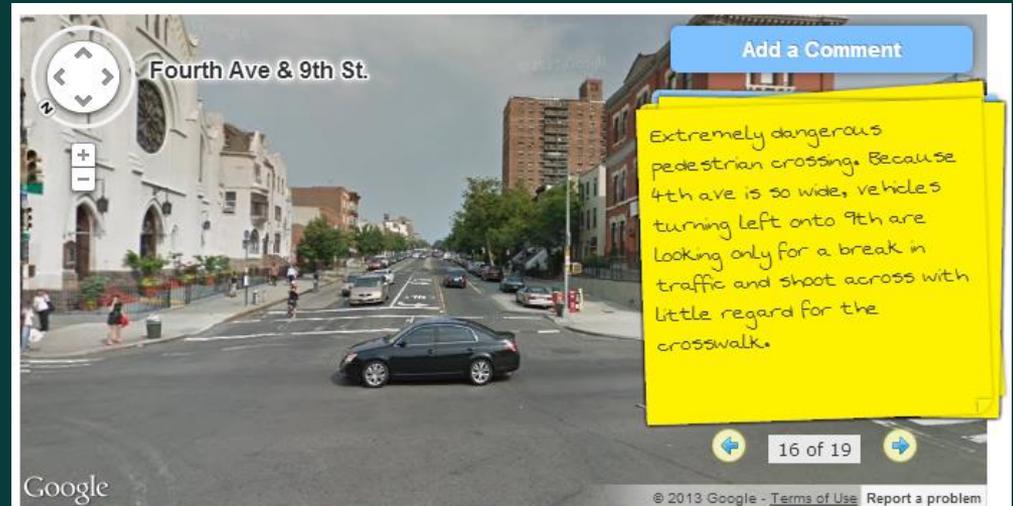
**Lugar:** St Thomas Aquinas Church, Parish Hall (piso de abajo, entre por la 4th Avenue), 249 9th Street, Brooklyn

**Contacto:** Christopher Hrones en NYCDOT, 718-222-7259

**Objetivos del taller:**

- Identificar los problemas de seguridad en las calles
- Recibir comentarios
- Discutir de soluciones para el diseño de las calles
- Discutir maneras de mejorar la 4th Avenue

  [www.NYC.gov/4thave](http://www.NYC.gov/4thave)  



Fourth Ave & 9th St.

Add a Comment

Extremely dangerous pedestrian crossing. Because 4th ave is so wide, vehicles turning left onto 9th are looking only for a break in traffic and shoot across with little regard for the crosswalk.

16 of 19

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Atlantic Ave Pacific St Bergen St Warren St Butler St Douglass St Sackett St Union St President St 5th Ave Carroll St Garfield Pl 3rd St 1st St 2nd St 5th St 7th St 8th St 9th St 10th St 11th St 12th St 13th St 14th St

Fourth Avenue

19 Comments

# Extensive Public Input

Community Safety Request  
to DOT

Task Forces form,  
DOT initiates safety project

Community-Driven  
Arterial Redesign

## Workshop 2/12/13 at St Thomas Aquinas Parish Hall

Brainstorm Issues  
and Rank Priorities

Discuss Crash and  
Speeding data

Give input on possible  
street redesigns



## Open House 4/9/13 at St Thomas Aquinas Parish Hall

Review Workshop  
Input

Present Initial  
Redesign ideas

Give DOT feedback  
on design

**CB6** 5/16/13, 6/12/13, 7/10/13\*

**CB2** 5/21/13, 6/12/13

# New Changes since 6/12/13

## Calming

- \* Retain 3 lanes NB starting at Carroll St (rather than Union St): adds 2 blocks of storage

## Fewer left turn bans

- \* Reduced from 8 turn bans to 6 overall: northbound lefts retained at Degraw and Butler

## 5<sup>th</sup> St

- \* Slow turns with painted curb extension on southeast corner, and two speed humps

*Note: No changes to CB2-approved area*

# Why 4<sup>th</sup> Avenue in Park Slope?

- 53 people have been killed or severely injured on 1.4mi: 2007-2011
- Ranks in the top 10% of Brooklyn corridors in KSI per mile
- Senior pedestrian killed at 15<sup>th</sup> St in 2008
- Off-peak speeding: up to 78% speeding above 30 mph limit

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## Fourth Ave Tied for Third Most Dangerous Road in Brooklyn for Peds

The Tri-State Transportation Campaign rated the notorious speedway the third most dangerous road in the borough with four fatalities since 2008.

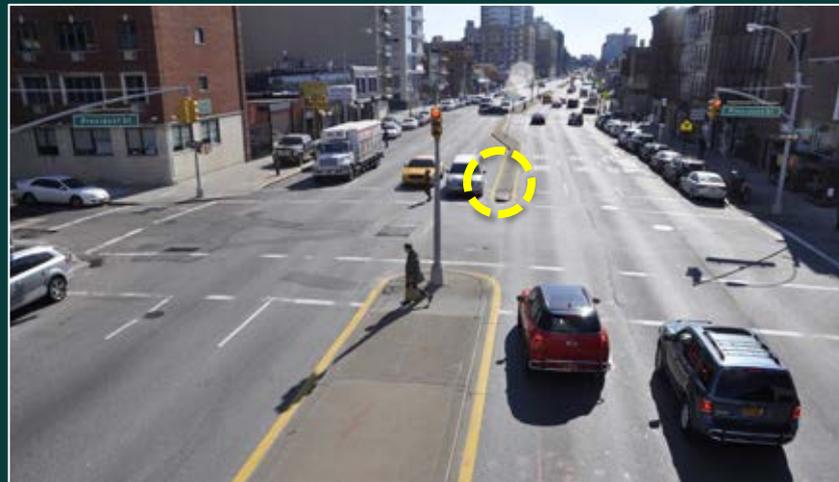
Posted by Will Yakowicz (Editor), March 12, 2012 at 10:06 pm



# Substandard Existing Conditions



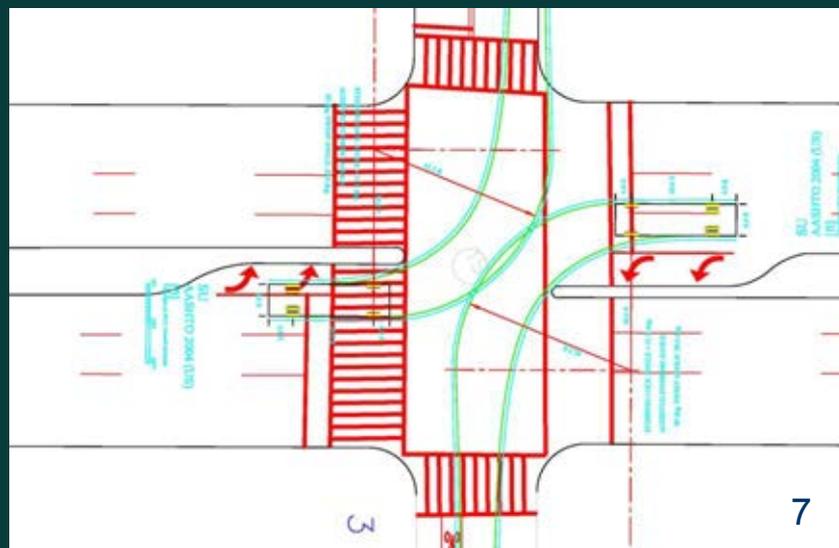
Split R-train platforms mean crossing 4<sup>th</sup> Ave at street level



2' wide pedestrian medians next to turn bays near subway



Double parking: 4<sup>th</sup> Ave functions as 2 lanes (not 3)

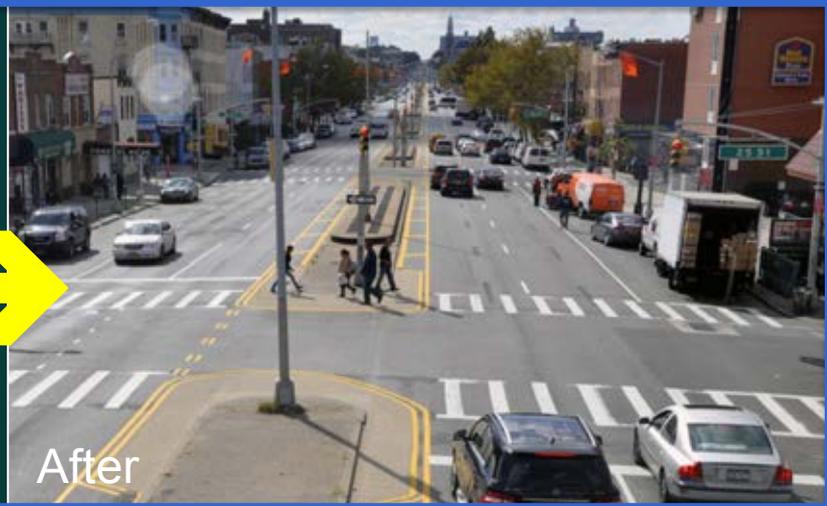


Conflicting opposing left turns

# Recent 4<sup>th</sup> Ave projects



Before



After

4<sup>th</sup> Ave Sunset Park (15<sup>th</sup>-65<sup>th</sup> Streets): August-November 2012



4<sup>th</sup> Ave and 9<sup>th</sup> St safety projects: 2009, 2011, 2012



4<sup>th</sup> Ave and Atlantic Ave: August 2011

# Community Concerns

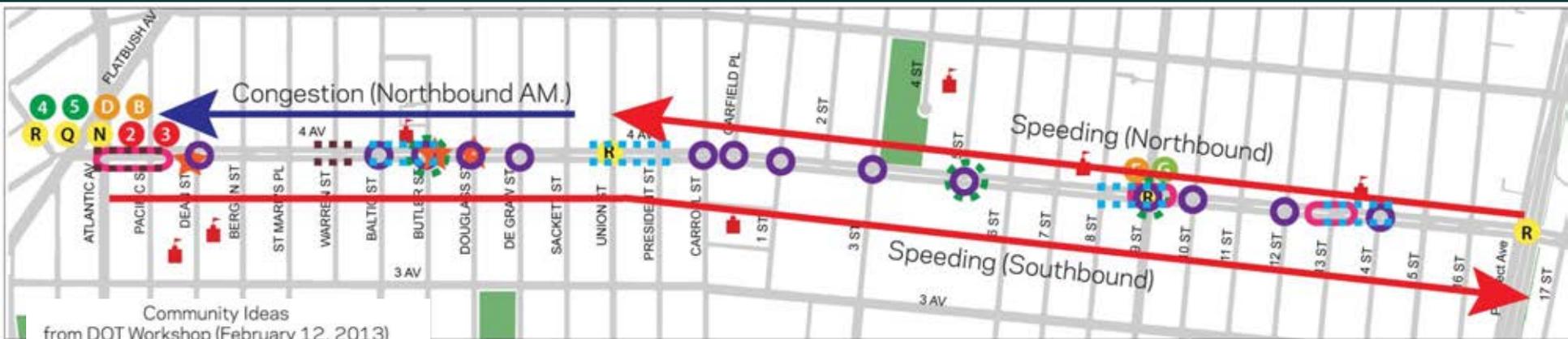
## DOT asked: “Top Issues on 4<sup>th</sup> Avenue?”

- Speeding
- Pedestrian Safety
- Narrow Medians
- Beautification
- Safer Crossings
- Double Parking



Public Workshop, February 12, 2013

# Community Feedback



Community Ideas from DOT Workshop (February 12, 2013) and website (February 12 - April 1, 2013)

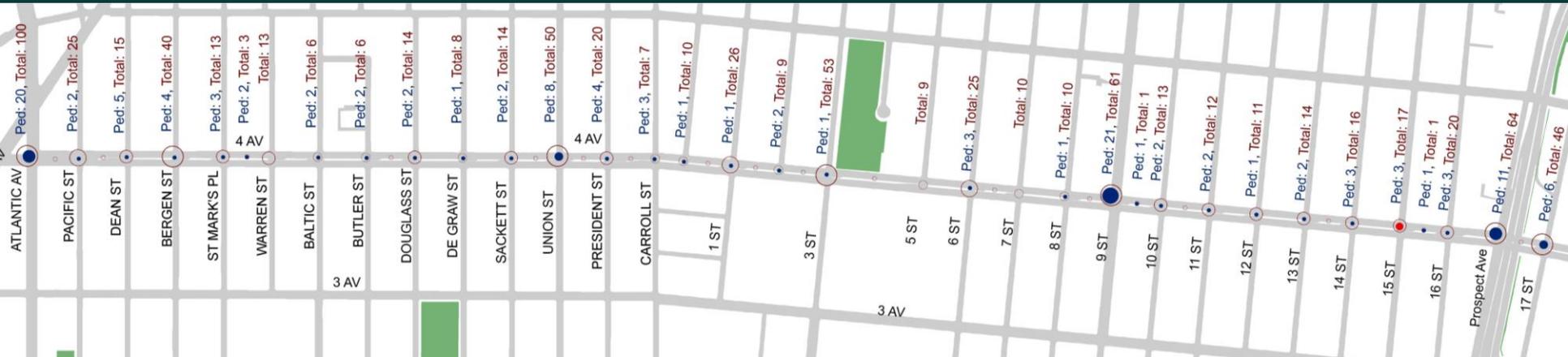
-  Top Priority Area
-  Double Parking
-  Left Turn Ban?
-  Median or curb extension
-  Bike parking
-  Daylighting
-  School

- Pedestrian crossing issues near schools and subways
- Speeding on nearly entire corridor
- Congestion noted northbound approaching Atlantic Ave



Over 450 comments posted on the 4<sup>th</sup> Avenue website

# Crash Hotspots



Atlantic Av:  
20 pedestrian injuries  
100 overall injuries

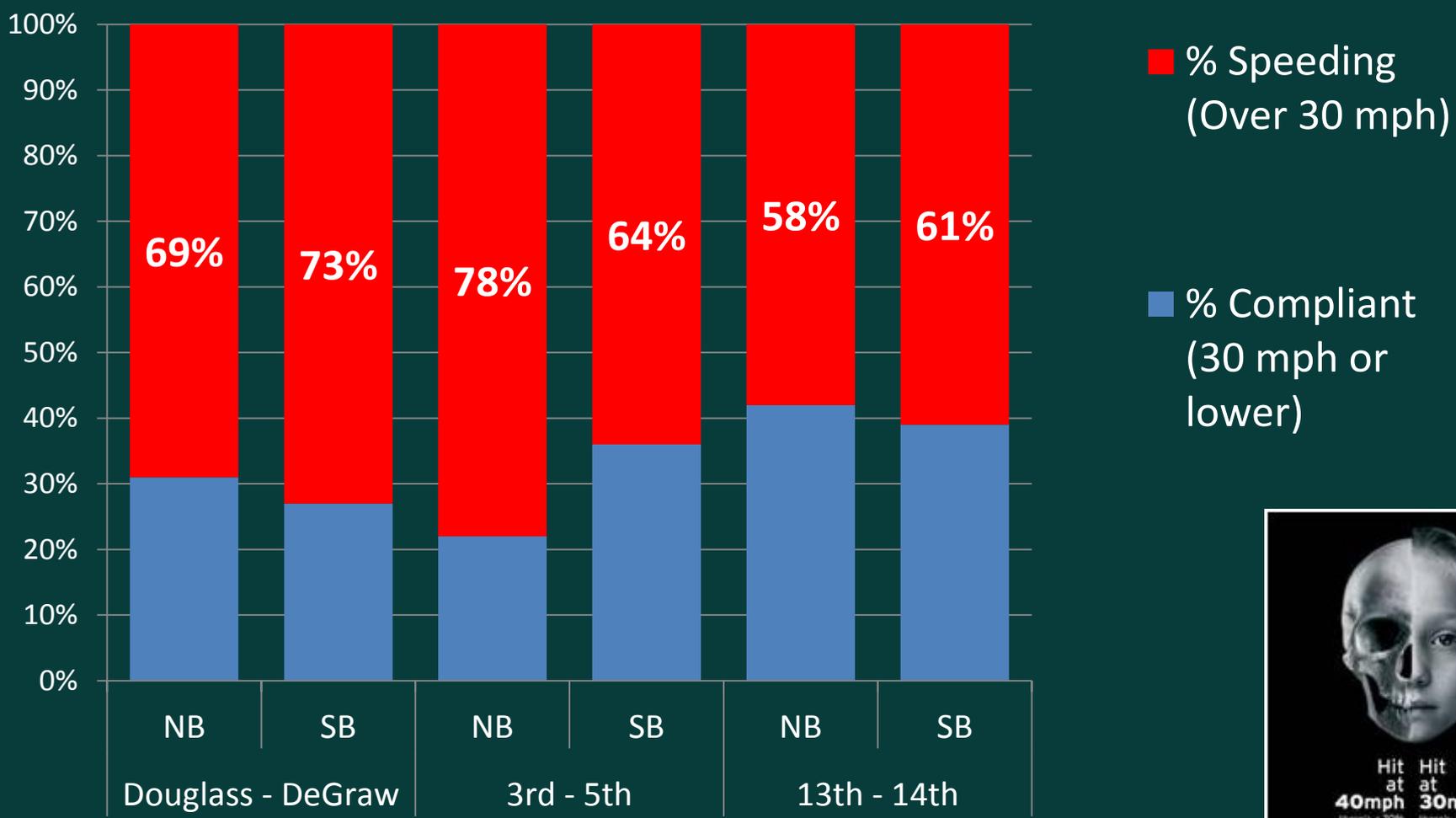
3<sup>rd</sup> St:  
1 pedestrian injury  
53 overall injuries

Union St:  
8 pedestrian injuries  
50 overall injuries

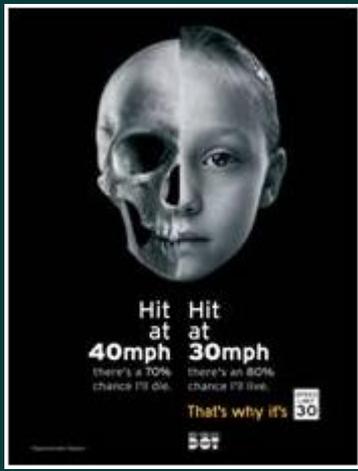
9<sup>th</sup> St:  
21 pedestrian injuries  
61 overall injuries

15<sup>th</sup> St:  
1 pedestrian fatality  
17 overall injuries

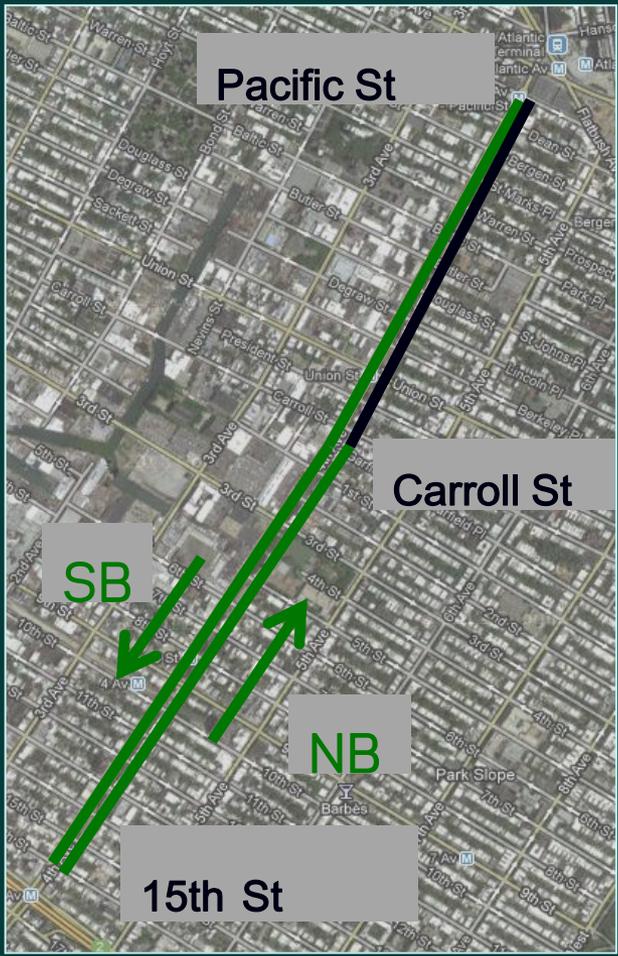
# 2 out of 3 vehicles are speeding



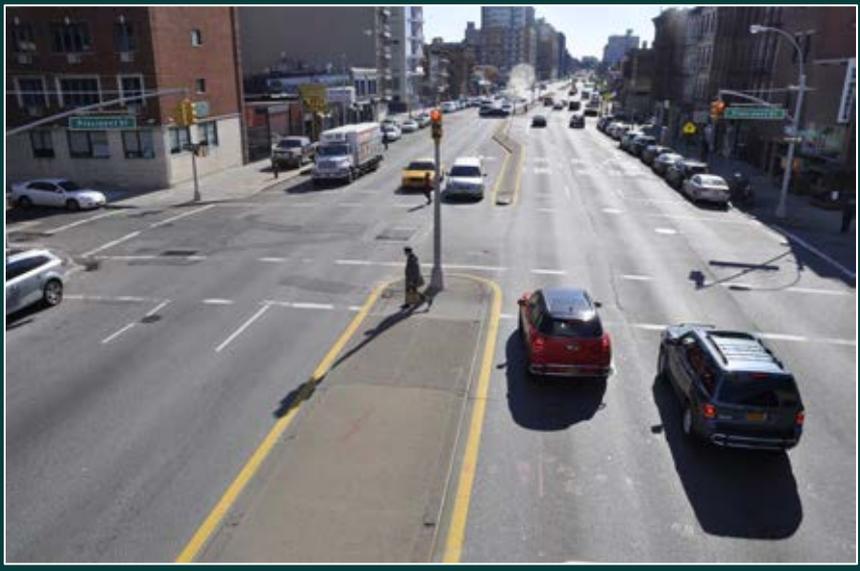
- Method: Contractor conducted by radar midweek 9-11pm



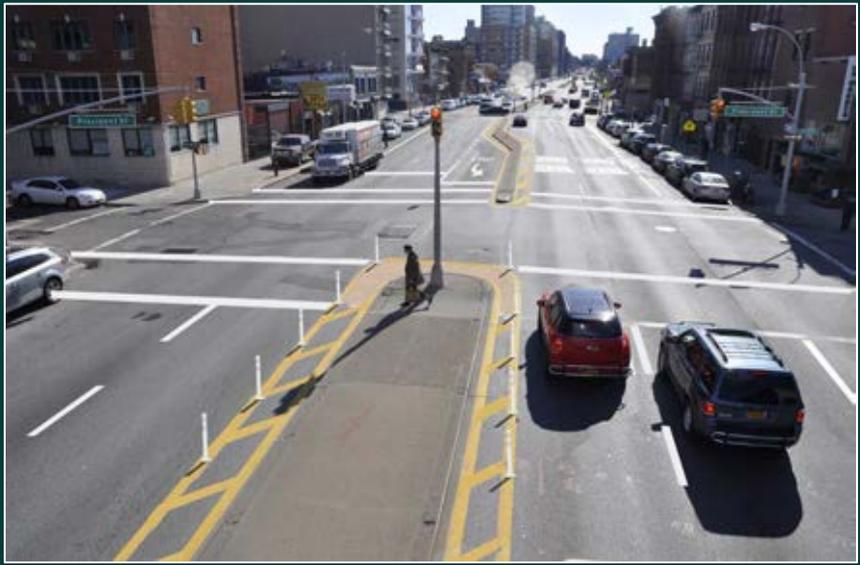
# Proposal: Wider Refuge, 2 Better Lanes



Existing



Proposed



- Proposed Lane Reductions:
- SB Pacific to 15<sup>th</sup> St
  - \* NB 15<sup>th</sup> St to Carroll St



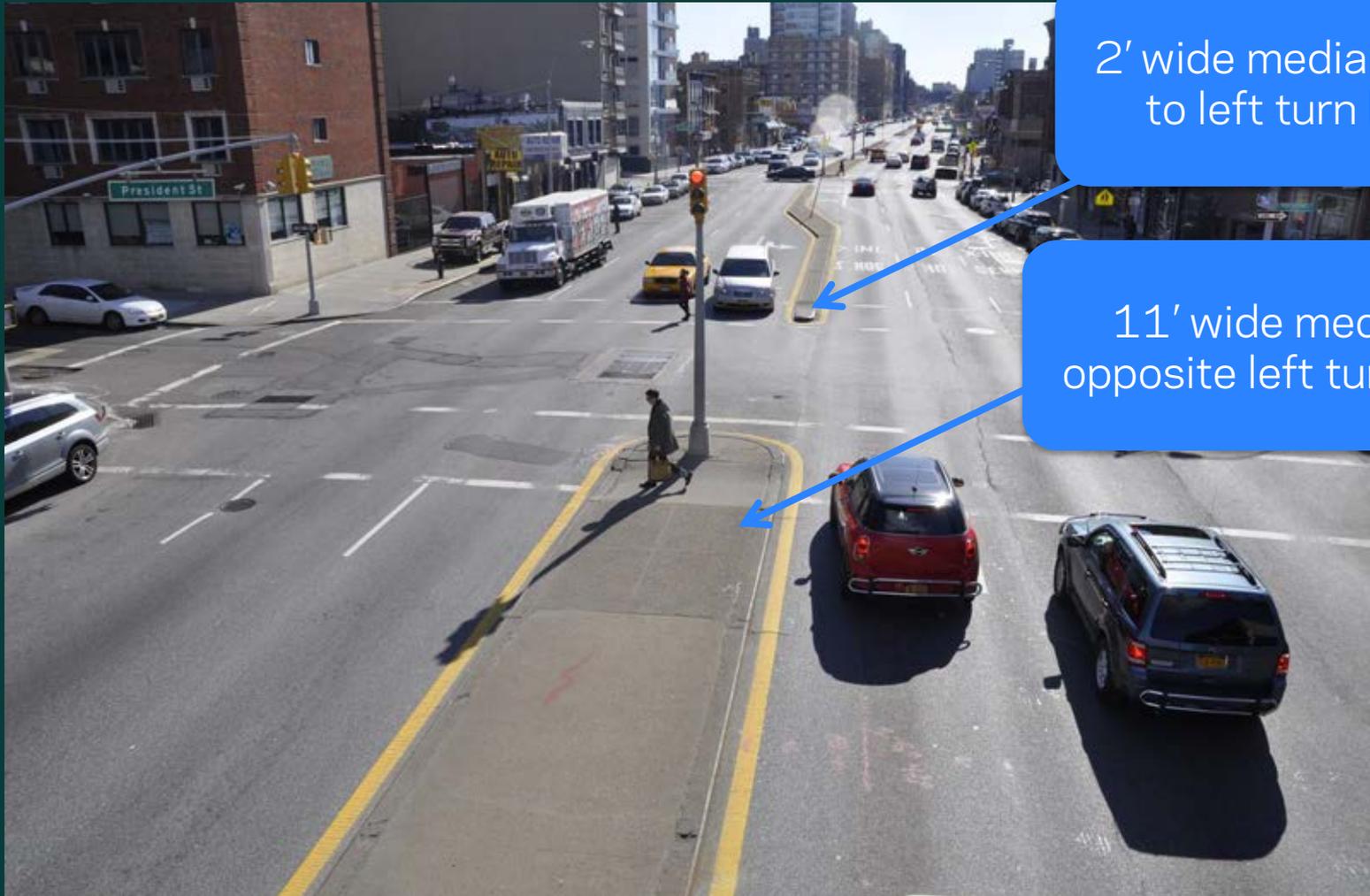
# How Traffic Will Work

VPH at peak times	SB		NB	
	AM	PM	AM	PM
Dean St	400	675	1025	600
Union St	775	1200	1300	925
9 <sup>th</sup> St	850	1375	1425	975
Prospect Ave	500	1175	1725	1150

Data was also collected before a Barclays Center Brooklyn Nets game (vs. Toronto) on the eve of Tues 1/15/13. Rush hour volumes were higher.

- Peak traffic in Park Slope (north of Prospect) is ~1400 vehicles/hour
- 4<sup>th</sup> Avenue has two-thirds of signal time, except at 9<sup>th</sup> Street
- Lane capacity is near 1000 vehicles/hour per lane
- Two lanes provide ample capacity, after 9<sup>th</sup> Street signal changes
- Exception: Northbound morning spillback approaching Atlantic Ave
  - 3 lanes of storage will be provided north of Carroll St

# Typical Location: Existing



2' wide median next to left turn bay

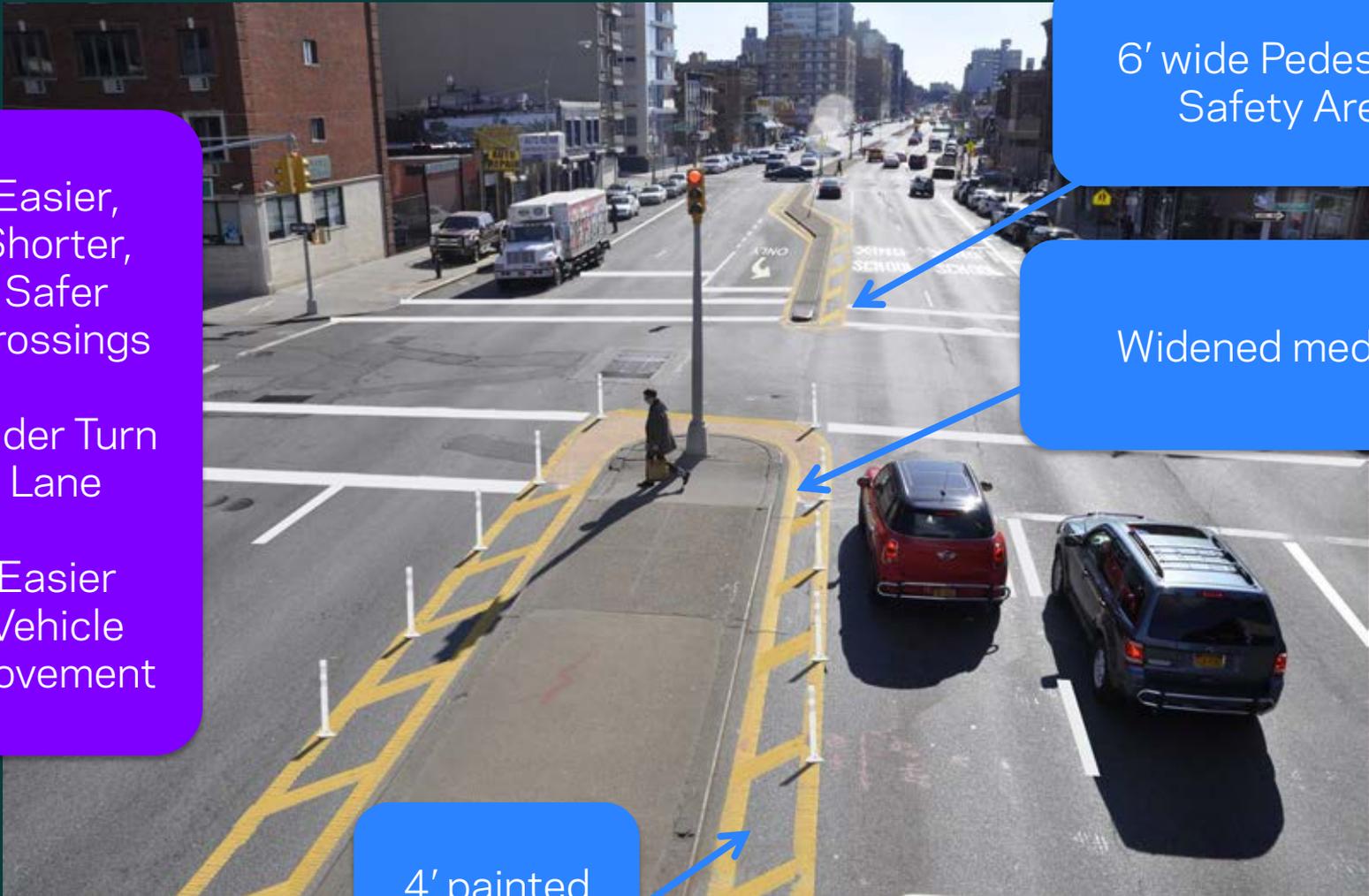
11' wide median opposite left turn bay

# Typical Location: Proposed

Easier,  
Shorter,  
Safer  
Crossings

Wider Turn  
Lane

Easier  
Vehicle  
Movement

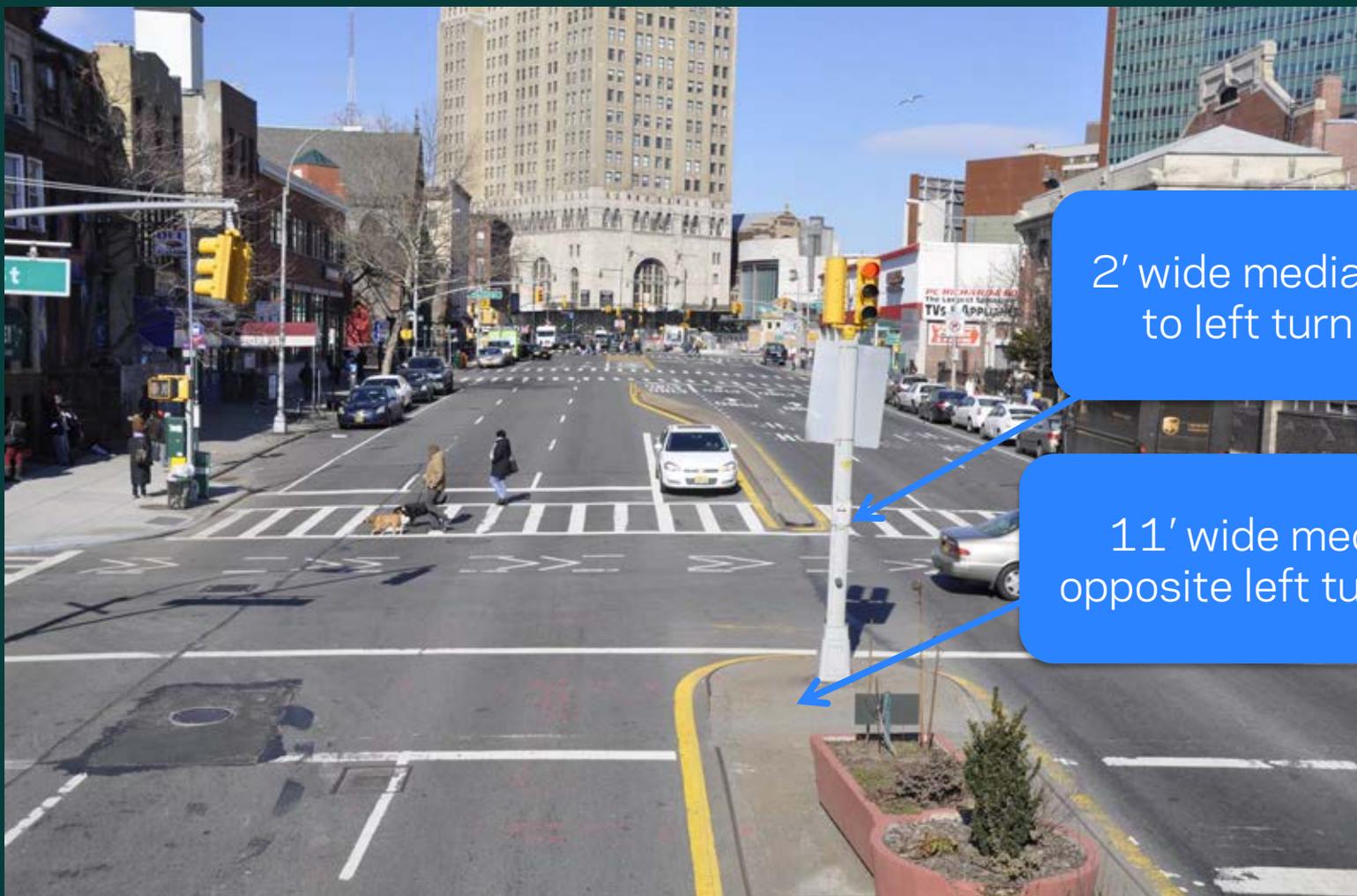


6' wide Pedestrian  
Safety Area

Widened median

4' painted  
buffer

# Focus Locations: Existing



2' wide median next to left turn bay

11' wide median opposite left turn bay

# Focus Locations: Proposed

Left Turn  
Risk  
Eliminated

Smoother,  
Conflict-  
Free  
Vehicle  
Travel

Easier,  
Shorter,  
Safer  
Crossings

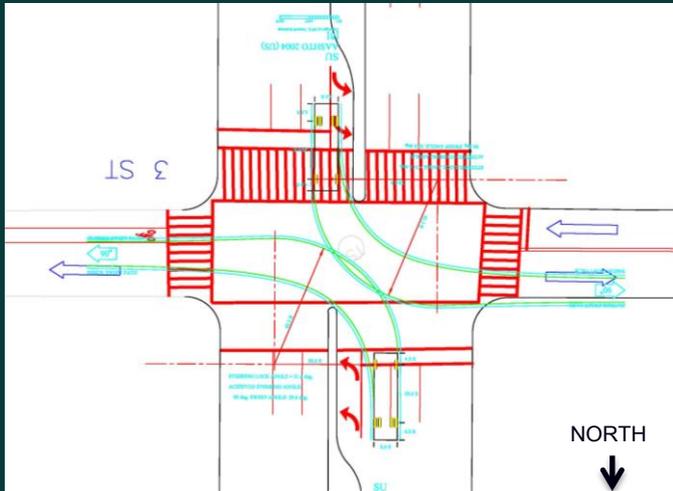
15'+ wide median  
replaces left turn bay

15'+ wide median  
opposite former bay



6\* locations - Subways and Schools prioritized:  
Dean St SB, 3<sup>rd</sup> St SB, 8<sup>th</sup> St NB, 9<sup>th</sup> St SB, 13<sup>th</sup> St NB, 14<sup>th</sup> St SB

# Opposing Left Turns: 3<sup>rd</sup> St



**Existing:** Head-on left turn radii cross

- At narrow cross streets, left turns off 4<sup>th</sup> Ave cross paths
- NB left at 3<sup>rd</sup> St has signal phase, much higher turn volume
  - Lefts: 192AM/116PM vph NB vs. 21AM/29PM vph SB
- 52 motor vehicle occupant injuries (2007-2011):
  - 48.5%: left turn or right angle crashes
  - 25.7% were Rear-End crashes
  - Sum: 74.2% of known motor vehicle occupant injuries
- 1 pedestrian injury (2007-2011)

# Opposing Left Turns: 3<sup>rd</sup> St



- June counts confirm: 3x to 9x more NB lefts than SB at peaks
  - 3<sup>rd</sup> St and 9<sup>th</sup> St are routes off 4<sup>th</sup> Ave across the Gowanus
  - *Seems* like more SB left turners because so few get through
  - Many ConEd trucks make NB left to access facility
- SB left turn ban benefits:
  - Creates wide refuge (not possible with partial hour turn ban)
  - Good for parents and children crossing from park and school
  - Safer NB left turn for drivers

# Proposed: 3<sup>rd</sup> St



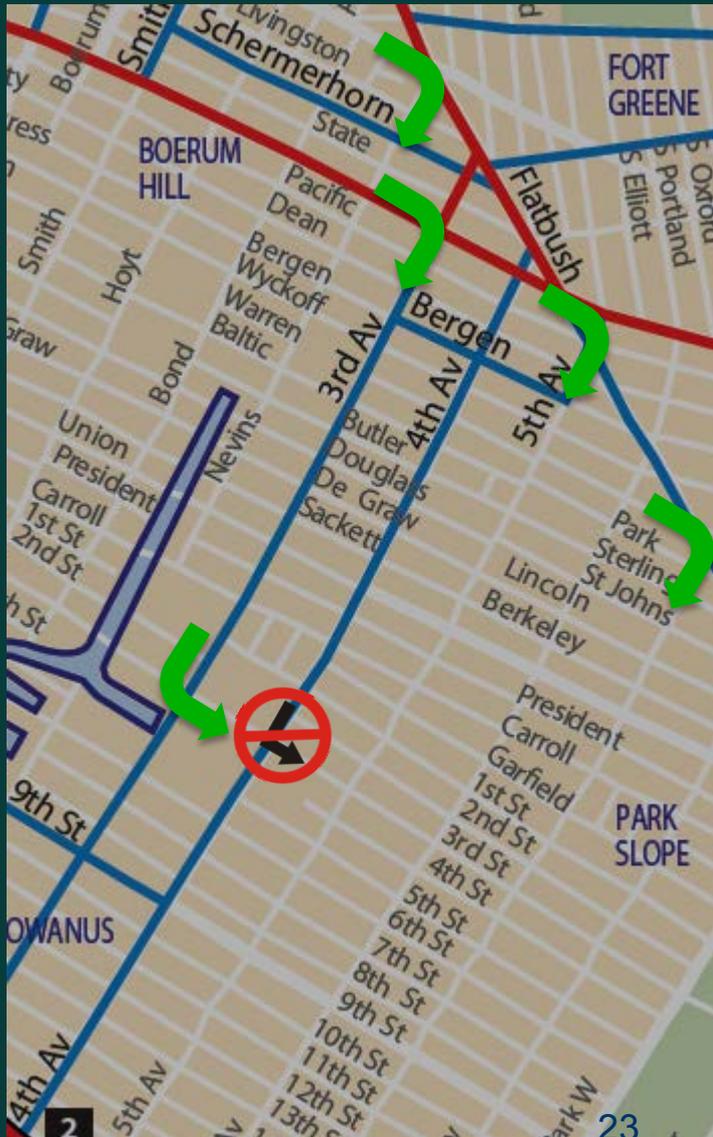
Removes conflicts with pedestrians in east crosswalk

Safer, easier northbound left turn, from a wider bay

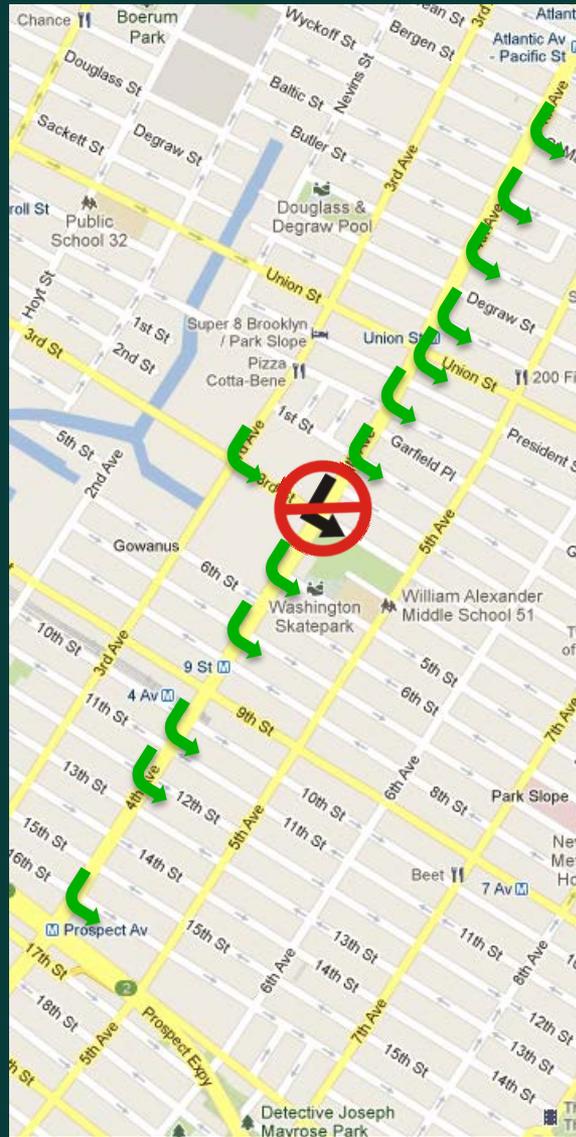
19' wide pedestrian safety area replaces left turn bay

**Proposed:** Safer driving experience, new 19' wide refuge for peds crossing from playground and school

# 3rd St SB turn ban: Alt Routes



SB School Buses: Take 3rd Av SBL, Flatbush



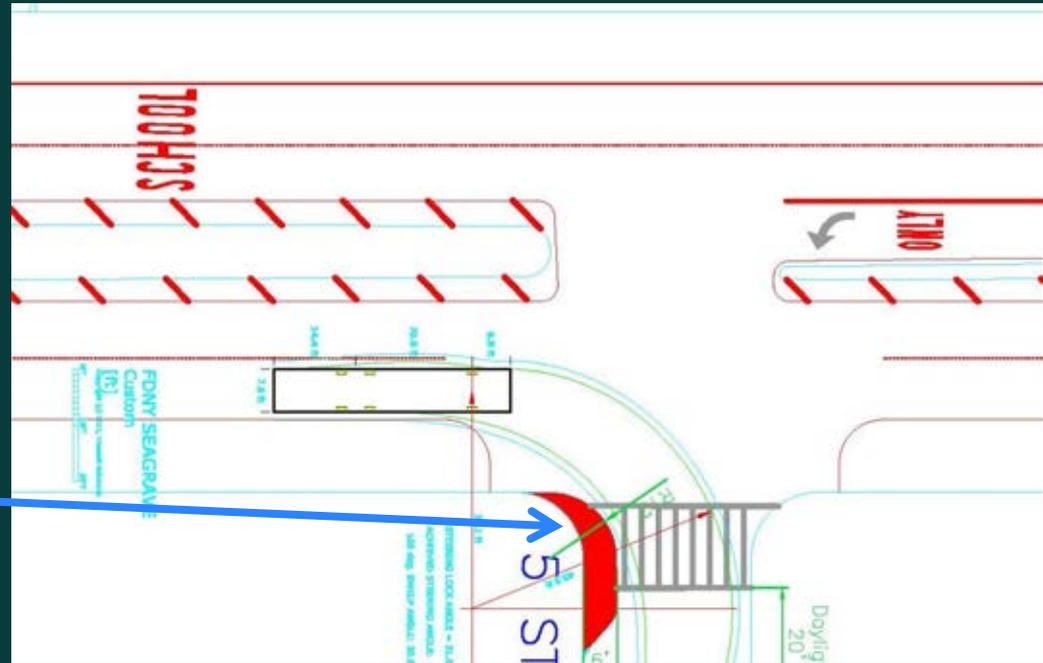
Cars: Many other options



Existing left turn bays on 3rd Ave

# 5<sup>th</sup> St: Add Painted Curb Extension

Extend SW curb to shorten west crossing

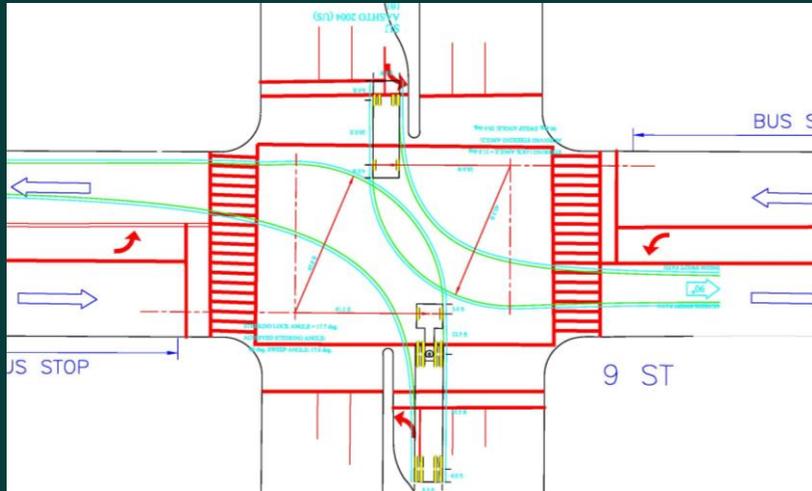


5<sup>th</sup> St: Low traffic, no pedestrian or severe injuries

**Proposed:** Safer turns on to 5<sup>th</sup> St, shorter crossing distance

- Reevaluated signal request, but does not meet school warrant
- Propose 8' wide southeast corner curb extension in east crosswalk to slow turns on to 5<sup>th</sup> St
- Would remove 1 parking spot on south curb
- MS51 principal requested speed humps, which were approved

# Opposing Left Turns: 9<sup>th</sup> St



9<sup>th</sup> St SB near future PS118, Subways, Buses

- Highest pedestrian volumes – and injuries – on corridor
- Left turns off of 4<sup>th</sup> Avenue cross paths
- Banning the SB left at 9<sup>th</sup> St makes intersection less chaotic
  - Improved safety for northbound left turning vehicles
  - Smoother southbound and northbound vehicle travel
  - Removes conflicts with peds in north and east crosswalks
  - Creates refuge in the north crosswalk between entrances to the split uptown/downtown R-train platforms

# 9th St: Existing



1425 vph  
AM NB

Short turn bay, not  
a truck route turn,  
60 lefts/hr at peak  
(=2 per cycle)

Conflicts with 500  
AM peak hour peds in  
the east crosswalk

# 9th St: Proposed

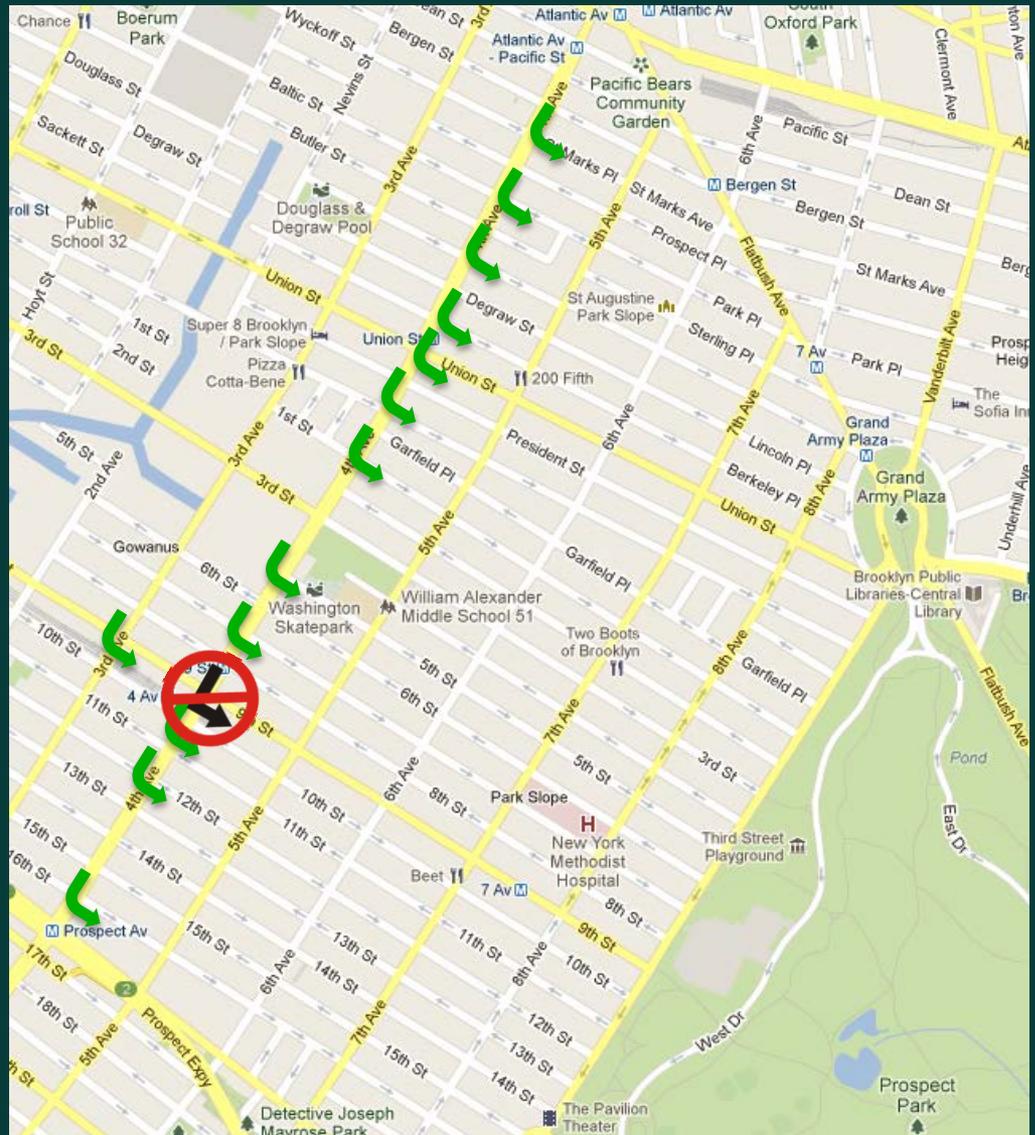
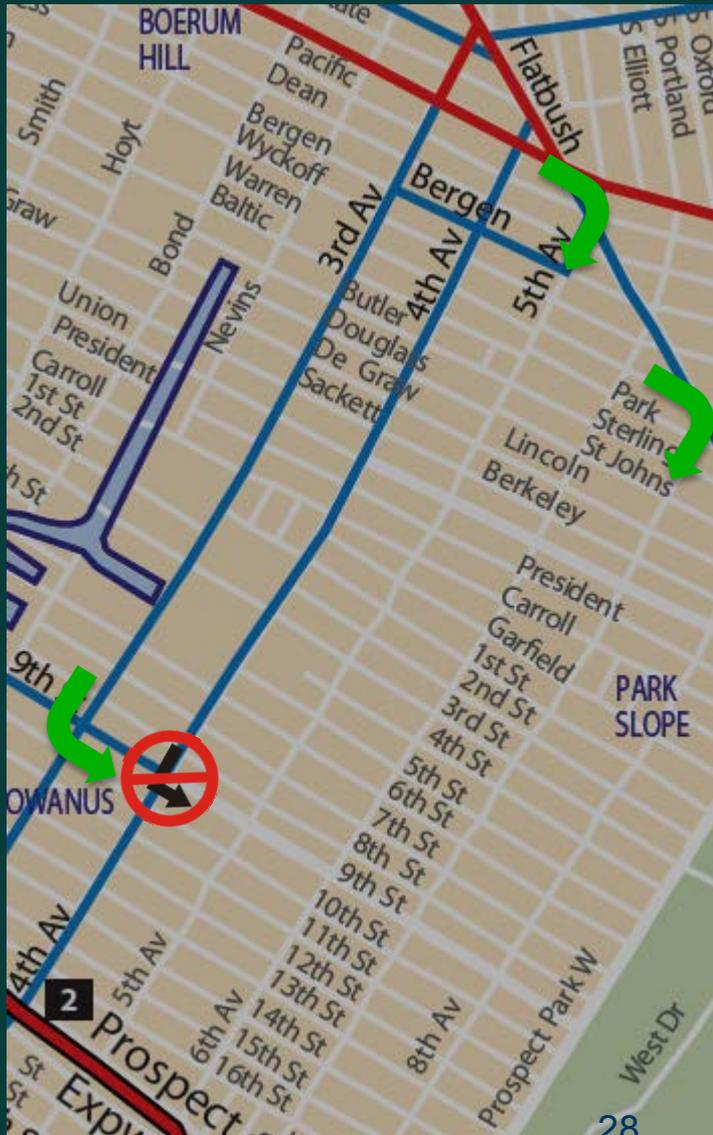


New wide pedestrian safety area  
Between R platforms

Adds refuge for 700 AM peak hour peds in north crosswalk across 4th Ave

Removes conflicts with pedestrians in east crosswalk

# 9th St SB turn ban: Alt Routes



SB Local Deliveries Take 3rd Av SBL, Flatbush

Cars: Many other options

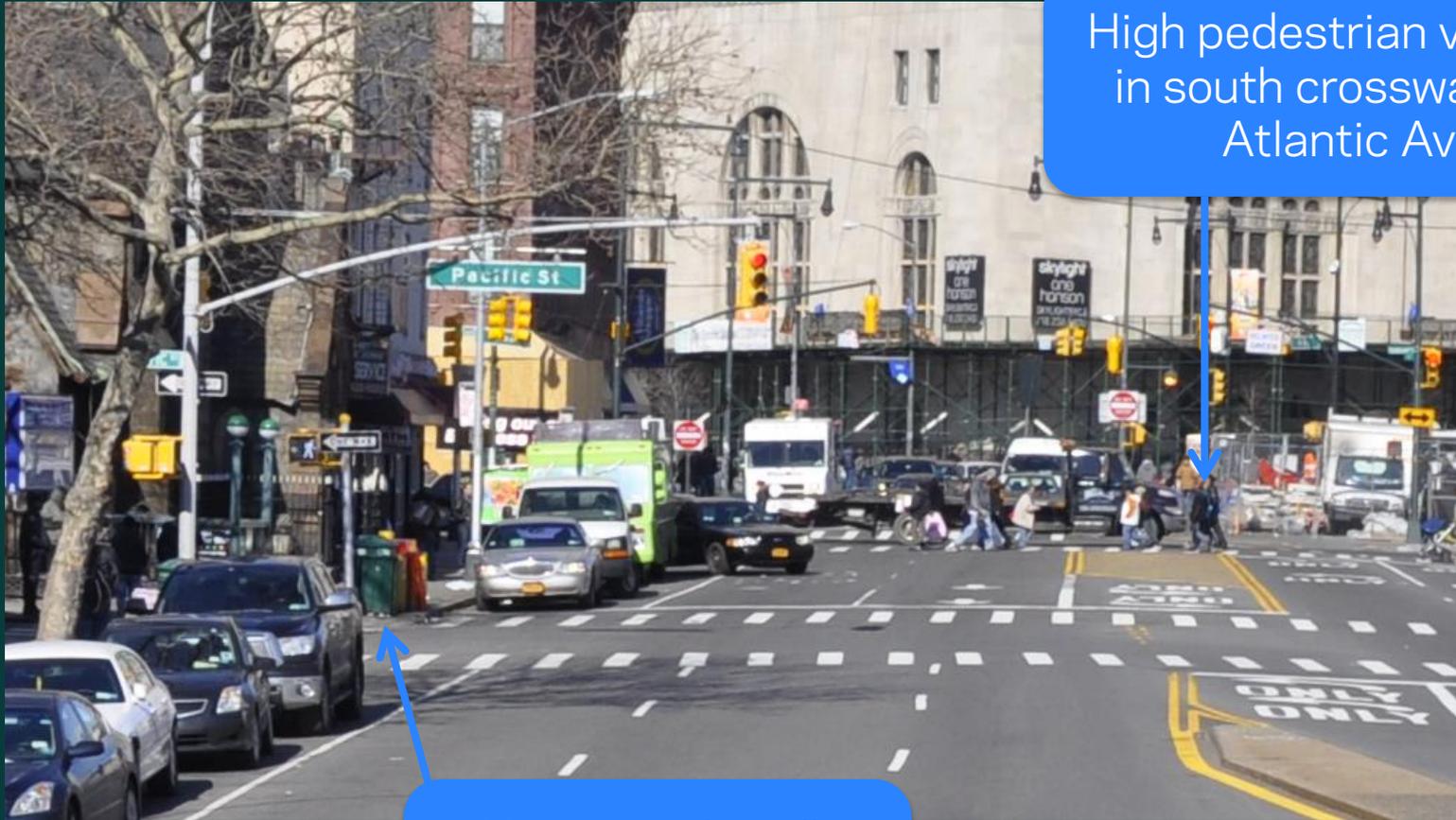
# Left Turn Access Preserved

Northbound	Southbound	Focus
Pacific St	Pacific St	
Bergen St	<b>Dean St</b>	 Subway Station
Warren St	St Marks Pl	
<i>Butler St</i>	Baltic St	P. S. 133
<i>Degraw St</i>	Douglass St	
<del>Union St</del>	Union St	
President St	Carroll St	
1 <sup>st</sup> St	1 <sup>st</sup> St	
3 <sup>rd</sup> St	<b>3<sup>rd</sup> St</b>	 M.S. 51, Old Stone House
6 <sup>th</sup> St	5 <sup>th</sup> St	
<b>8<sup>th</sup> St</b>	7 <sup>th</sup> St	P.S. 118
9 <sup>th</sup> St	<b>9<sup>th</sup> St</b>	 Subway, P.S. 118
11 <sup>th</sup> St	10 <sup>th</sup> St	
<b>13<sup>th</sup> St</b>	12 <sup>th</sup> St	P.S. 124
15 <sup>th</sup> St	<b>14<sup>th</sup> St</b>	 P.S. 124

- 14 NB left turns
- 2 bans proposed\*
- 44 AM diverted vph
- 12 alternates
  
- 15 SB left turns
- 4 bans proposed
- 129 PM diverted vph
- 11 alternates

\*Removed 2 NB left turn ban proposals:  
Butler and Degraw Sts

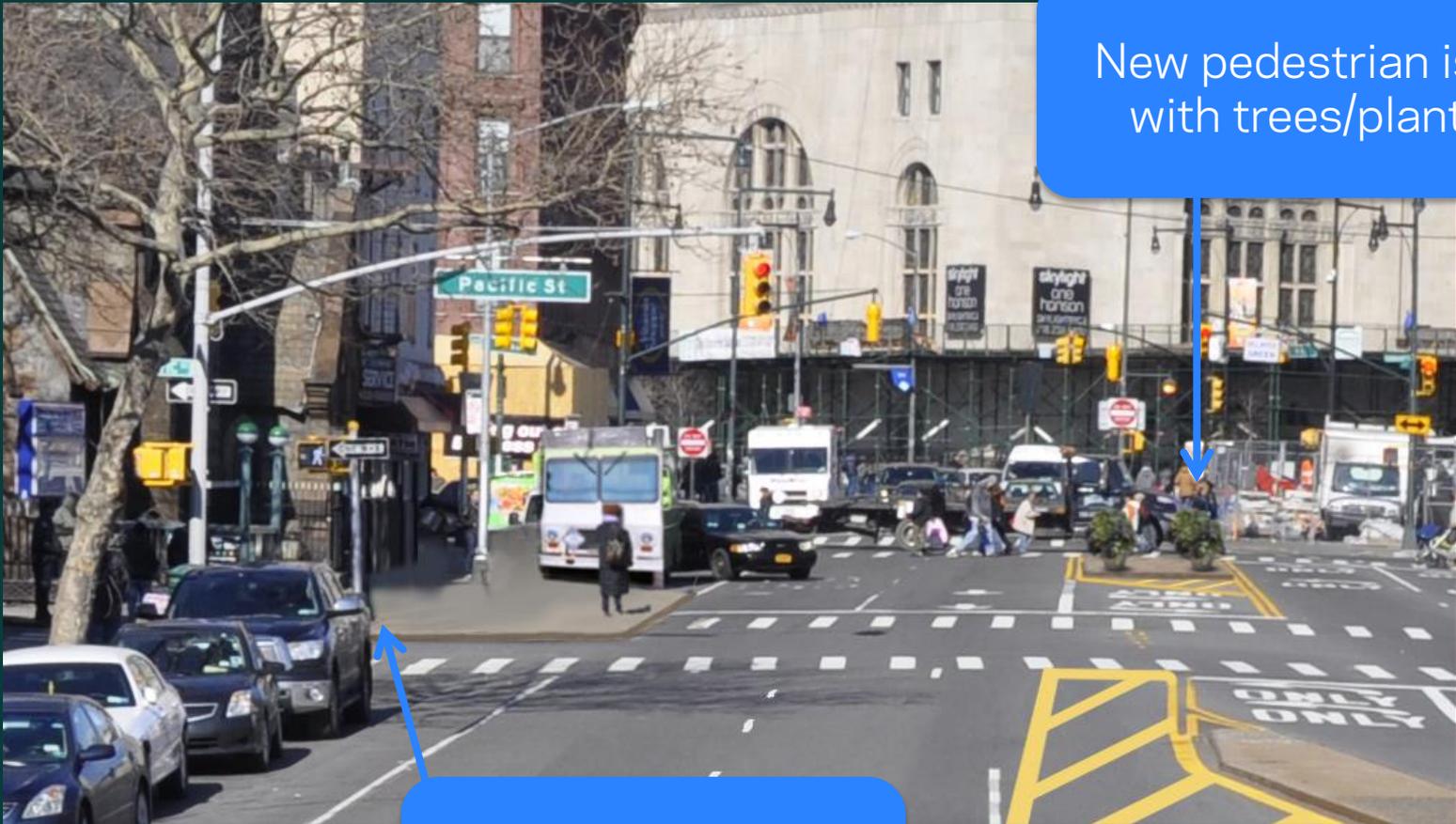
# Atlantic Av-Pacific St: Existing



High pedestrian volume  
in south crosswalk at  
Atlantic Av

Narrow sidewalk  
near subway stairs  
at Pacific St

# Atlantic Av-Pacific St: Proposed



New pedestrian island with trees/planters

New curb extension (capital)

# Benefits of Proposal

- Better for Pedestrians
  - Shortens 50 pedestrian crossings
  - Adds 10 High Visibility and 9 School Crosswalks
- Better for Drivers
  - Reduces lane changes, slaloms, and interruptions
  - Provides 2 lanes with integrity and with fewer conflicts
  - Better organizes roadway to allow smoother traffic flow
  - Less back-pressure for left turners from through vehicles
  - Widens parking lane: safer to open drivers side car door
  - Safer for cyclists: bike-friendly wide parking lanes
- Better for Residents, Subway Riders, and School Safety
  - Calms off-peak speeding, widens pedestrian refuges
- Beautification opportunity on expanded refuges
  - Piloting low maintenance median planters now in CBs 2, 6, 7



[nyc.gov/4thave](https://nyc.gov/4thave)

Thank  
You

Contact: Brooklyn Borough Commissioner's Office (718) 222-7259