

HIGH PEDESTRIAN CRASH LOCATIONS

Pedestrian Safety Improvements at the Top 20 Crash Intersections: 2009

March 2013



Janette Sadik-Khan
Commissioner

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INTRODUCTION

In 2011, New York City experienced 245 motor-vehicle involved crash fatalities, the lowest number ever reported in a century of record-keeping. Annual traffic fatalities have decreased 65 percent since 1990, and 38 percent since 2001. While traffic fatalities decreased rapidly in recent years, DOT is committed to finding new ways to further improve safety on our City's streets.

This report specifically addresses DOT's ongoing commitment to improve safety at high pedestrian crash locations. Local Law 11 enacted on April 1, 2008 amends the administrative code of the City of New York (§19-180) to require DOT to "identify the twenty highest crash locations based upon a ranking of the total number of crashes involving pedestrians" within 180 days of receiving data from the State Department of Motor Vehicles and "inspect and conduct audits at such locations."

Local Law 12 of 2011 further amends the administrative code to require DOT to "identify the twenty highest crash locations based upon a ranking of the total number of crashes involving pedestrians killed or seriously injured, occurring over a five-year period." The method outlined in this provision of Local Law 12 will first apply to the top twenty high pedestrian crash locations for 2010.

The top twenty high pedestrian crash locations for 2009 are addressed in this report. The number of locations in each borough is based on the proportion of citywide pedestrian injuries by borough. Safety improvements have been recently implemented at a majority of the locations and some are scheduled to be implemented in the near future. Other locations, because of their complex roadway geometry, land use and other constraints, require further study.

Other Major DOT Safety Programs & Initiatives

The New York City Pedestrian Safety Study & Action Plan, released in August 2010, examined eight years of traffic crash data, analyzing over 7,000 records of fatal or severe-injury pedestrian crashes, and identifies underlying causes that can be addressed to reduce these crashes. Based on the findings of this study, DOT developed a comprehensive safety action plan. This action plan consists of highly targeted, data-driven elements including engineering, enforcement, public communication, and policy and legislation. The full report is available on New York City Department of Transportation's (DOT) website (www.nyc/dot.gov).

INTRODUCTION

The dramatic decrease in fatalities and injuries in recent years is in part attributable to DOT's data-driven efforts to focus its resources on particular groups of at-risk pedestrians, and high-crash locations and corridors. Two citywide programs, Safe Streets for Seniors and Safe Routes to Schools, use crash statistics to identify and address safety problems experienced by the most vulnerable pedestrian populations: the elderly and children. Launched in 2008, Safe Streets for Seniors focuses on 25 neighborhoods that have a high number of pedestrian fatalities or severe injuries involving adults 65 years and older. The program has completed improvements in 16 of these neighborhoods with plans underway for the remaining locations. Twelve new areas throughout the five boroughs have been identified for study beginning in 2012. The expanded program will go beyond improving intersections with high-crash histories to achieve greater livability goals through a richer understanding of neighborhood user needs. Through the Safe Routes to Schools program, short-term safety improvements have been completed at 135 schools in the Phase One Priority Schools. Long-term capital improvements have also been completed at 35 locations and 52 schools are in the design stage for Phase One schools. Additionally, studies for 75 schools in Phase Two of the program are underway.

Traffic calming projects have transformed high-crash corridors across New York City into more complete streets. These projects use left turn bays, roadway narrowing, pedestrian refuge islands and bicycle lanes to reduce the number and severity of crashes by reducing speeding and address other safety issues. Signal timing modifications and the installation of Leading Pedestrian Intervals—where pedestrians get a head start to cross streets before turning vehicles receive a green signal—have also been implemented at many intersections across New York City, improving pedestrian safety.

In 2011, DOT installed Pedestrian Countdown Signals along major high-crash corridors such as Queens Boulevard in Queens and the Grand Concourse in the Bronx, and dozens of other streets in all five boroughs. To date, over 1,900 countdown signals have been installed citywide with an additional 1,950 planned for new locations.

The City's first neighborhood 20 mph Neighborhood Slow Zone was implemented in the Claremont section of the Bronx, and communities throughout the City can now apply online for a zone in their neighborhood. The Speed Reducer program, also geared toward neighborhood streets, has installed nearly 2,000 speed humps in neighborhoods citywide, with a majority located adjacent to schools. DOT's Safe Routes to Transit program improves safety and security for pedestrians at intermodal transit hubs.

DOT's Safety Education program provides information and guidance to school children, senior citizens, drivers, pedestrians and cyclists, to keep New York City informed about traffic laws and the best techniques for avoiding danger and protecting other road users. DOT is also using social marketing techniques to help change behavior on city streets, and promote its safety messages more broadly through television, radio, outdoor, online and experiential media.

In February 2010, DOT launched a new anti-drinking-and-driving social marketing campaign aimed at young men ages 21-35, the group most likely to be involved in a DWI crash in New York City. Utilizing positive language, the campaign aims to valorize the designated driver and remind New Yorkers that the City is home to thousands of built-in designated drivers available 24/7—taxi and livery drivers, as well as the subway and bus system. Now in its third year, the campaign offers a free iPhone app that uses GPS to connect revelers to the nearest car service. An Android version is set to launch in spring 2012.

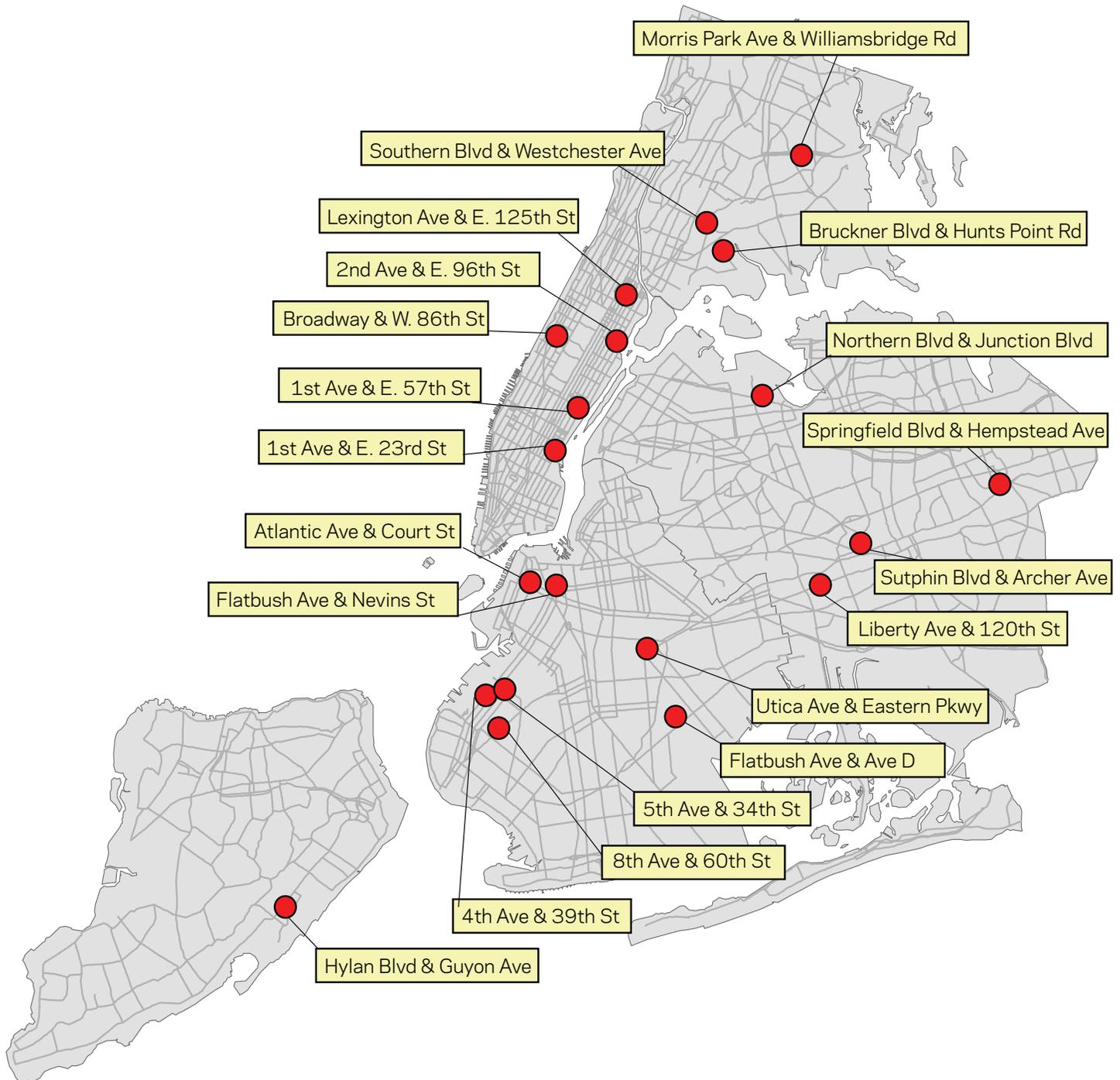
In October 2010, DOT launched It's 30 for a Reason, a multimedia campaign to reduce speeding. This campaign is designed to increase awareness of the City's 30 mph speed limit, as well as the dangers of excessive speed. The campaign was bolstered by the addition of special speed boards placed in documented high-speed locations that display the image of a skeleton when a driver exceeds the speed limit.

In May 2011, DOT debuted Don't Be a Jerk, a TV campaign featuring celebrities that humorously highlighted the top cycling rules of the road – yielding to pedestrians, staying off the sidewalk and riding in the direction of traffic. The ads run spring through fall when cycling rates are highest.

In the summer of 2012, DOT launched a special street-level campaign aimed at all road users collectively—drivers, cyclists and pedestrians. Titled the "LOOK" campaign, it highlights the most dangerous behaviors on city streets and is placed at specific locations where crashes occur most frequently.

DOT continues to look at innovative, creative ways to improve safety for all users.

TOP TWENTY HIGH PEDESTRIAN CRASH LOCATIONS



TOP TWENTY HIGH PEDESTRIAN CRASH LOCATIONS

Intersection	Borough	Number of Crashes (2009)
1st Avenue & 23rd Street	Manhattan	14
Lexington Avenue & East 125th Street	Manhattan	11
Atlantic Avenue & Court Street	Brooklyn	10
Bruckner Boulevard & Hunts Point Avenue	Bronx	8
Utica Avenue & Eastern Parkway	Brooklyn	8
4th Avenue & 39th Street	Brooklyn	8
2nd Avenue & 96th Street	Manhattan	8
1st Avenue & East 57th Street	Manhattan	8
Broadway & West 86th Street	Manhattan	8
Southern Boulevard & Westchester Avenue	Bronx	7
Flatbush Avenue & Avenue D	Brooklyn	7
5th Avenue & 34th Street	Brooklyn	7
Flatbush Avenue & Nevins Street	Brooklyn	7
8th Avenue & 60th Street	Brooklyn	7
Springfield Boulevard & Hempstead Avenue	Queens	7
Sutphin Boulevard & Archer Avenue	Queens	7
Liberty Avenue & 120th Street	Queens	7
Morris Park Avenue & Williamsbridge Road	Bronx	6
Northern Boulevard & Junction Boulevard	Queens	6
Hylan Boulevard & Guyon Avenue	Staten Island	4



BRONX



BRONX

Bruckner Boulevard & Hunts Point Ave

Crashes

- Ranked 1st in Bronx
- 8 pedestrian crashes in 2009

Location/Context

- Project Area: Five-legged intersection, heavy congestion
- Neighborhood: Hunts Point-Longwood
- Community Board: 2
- Council District: 17
- Land Use: Commercial, Historic Preservation Overlay
- Bus Routes: Bx5, Bx6, Bx19
- Subway: #6 at Hunts Point Avenue
- Local and Through Truck Routes: Bruckner Boulevard

Issues Identified

- Heavy pedestrian volumes
- Heavy vehicle volumes
- Pedestrian/vehicle conflicts
- Long crossing distances
- Poor compliance by pedestrians
- High retail-related pedestrian activity
- Substandard turn bays with heavy turn volumes

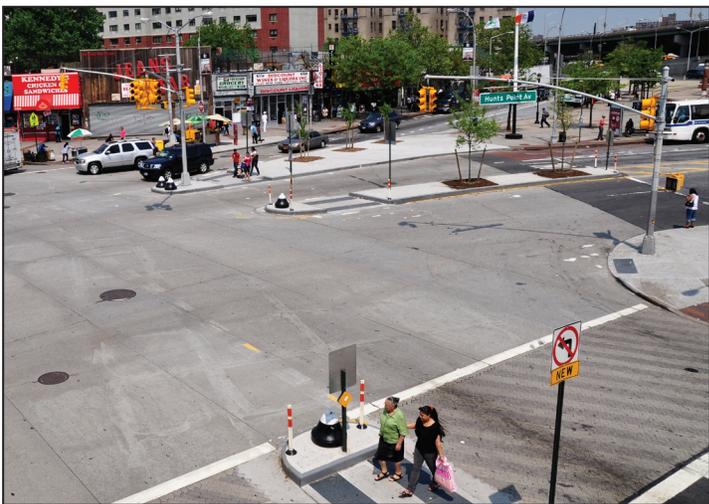


Implemented Improvements

- **Constructed pedestrian safety islands** in three crosswalks to reduce crossing distance
- **Extended and widened medians** on SB Bruckner Boulevard to provide pedestrian refuge space
- **Planted trees on median** to improve streetscape
- **Banned right turn** from SB Bruckner Boulevard to reduce vehicle and pedestrian conflicts
- **Refurbished markings and crosswalks** with advanced stop bars to increase visibility of pedestrians in crosswalk
- **Installed lane designation markings** to organize traffic flow
- **Installed pedestrian countdown signals**
- **Installed "LOOK" safety pavement markings** at crosswalks to alert pedestrians to oncoming traffic

Projected Implemented Improvements

- **Part of Crames Square - Southern Boulevard 2014 capital improvements**



Before and after photos of Bruckner Boulevard and Hunts Point Avenue intersection improvements

BRONX

Southern Boulevard & Westchester Ave

Crashes

- Ranked 2nd in the Bronx
- 7 pedestrian crashes in 2009

Location/Context

- Project Area: Wide road with dangerous turns under elevated subway line
- Neighborhood: Longwood
- Community Board: 2
- Council District: 17
- Land Use: Commercial, Institutional, Residential
- Bus Routes: Bx4, Bx5, Bx19, Bx27
- Subway: #2/5 at Simpson
- Local Truck Routes: Southern Boulevard and Westchester Avenue

Issues Identified

- Heavy pedestrian volumes
- Heavy vehicle volumes
- Pedestrian/vehicle conflicts
- Long crossing distances
- Poor compliance by pedestrians
- High retail-related pedestrian activity
- Disorganized traffic flow
- Skewed intersection
- Skewed crosswalks
- Substandard turn bays with heavy turn volumes
- Pedestrians crossing where no crosswalk exists



Implemented Improvements

- **Installed lane designation markings** to organize traffic flow
- **Installed new high visibility crosswalks** for better pedestrian visibility
- **Refurbished markings and crosswalks** with advanced stop bars to increase visibility of pedestrians in crosswalk
- **Installed pedestrian countdown signals**
- **Installed "LOOK" safety pavement markings** at crosswalks to alert pedestrians to oncoming traffic



Before: Disorganized traffic flow



After: 4 to 3 conversion and left turn bay implemented

BRONX

Morris Park Ave & Williamsbridge Road

Crashes

- Ranked 3rd in the Bronx
- 6 pedestrian crashes in 2009

Location/Context

- Project Area: Wide, two-way, four-lane streets, light neighborhood retail
- Neighborhood: Morris Park
- Community Boards: 11
- Council District: 13
- Land Use: Retail
- Bus Routes: Bx308, Bx21, BxM10
- Local Truck Routes: Morris Park Avenue and Williamsbridge Road
- Bike Routes: Potential route on Williamsbridge Road

Issues Identified

- Heavy vehicle volumes
- Pedestrian/vehicle conflicts
- Long crossing distances

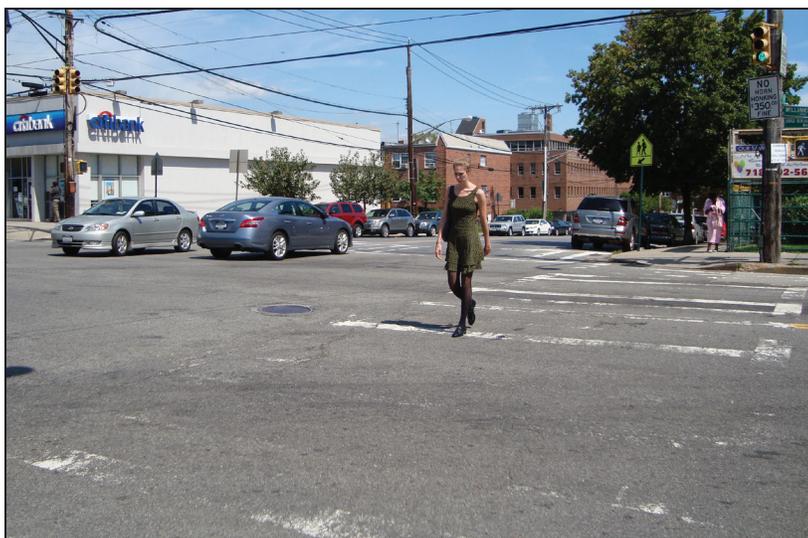


Implemented Improvements

- **Installed pedestrian countdown signals**
- **Installed "LOOK" safety pavement markings** at crosswalks to alert pedestrians to oncoming traffic

Projected Implemented Improvements

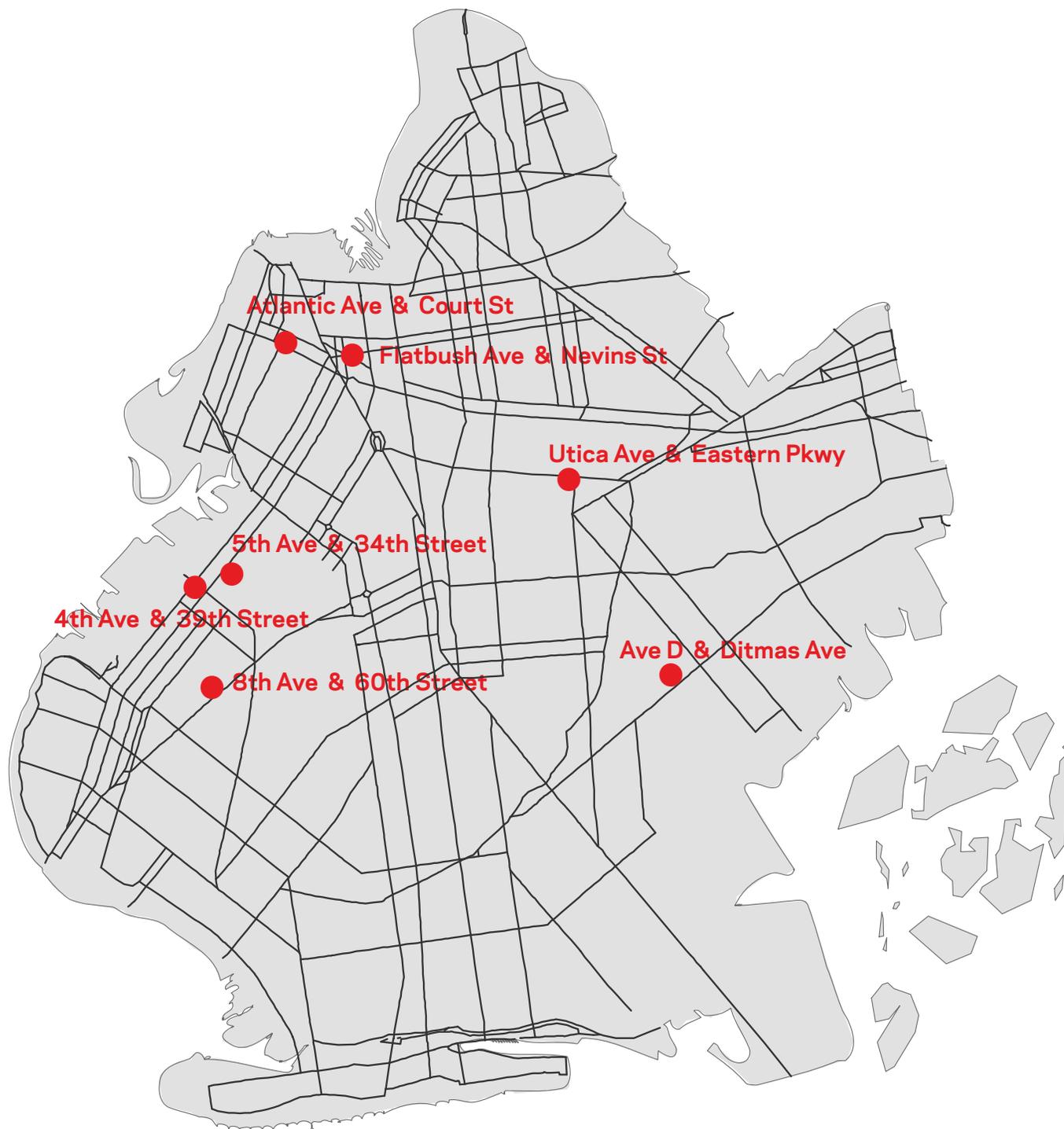
- **Refurbish markings and crosswalks** with advance stop bars to increase visibility of pedestrians in crosswalk
- **Under study by NYCDOT for potential traffic calming project**



Before: Faded markings and long crossing distances at intersection



BROOKLYN



BROOKLYN

Atlantic Avenue & Court Street

Crashes

- Ranked 1st in Brooklyn
- 10 pedestrian crashes in 2009

Location/Context

- Project Area: Four-way intersection
- Neighborhood: Boerum Hill/Cobble Hill
- Community Board: 2 and 6
- Council District: 33 and 39
- Land Use: Mixed use, commercial, residential
- Bus Routes: B57, 61, 63
- Local Truck Routes: Court Street
- Through Truck Routes: Atlantic Avenue

Issues Identified

- Heavy vehicle volumes
- Heavy pedestrian volumes



Implemented Improvements

- **Installed leading pedestrian interval** to provide pedestrians with more conflict-free crossing
- **Installed pedestrian countdown signals**
- **Installed “LOOK” safety pavement markings** at crosswalks to alert pedestrians to oncoming traffic



BROOKLYN

Utica Avenue & Eastern Parkway

Crashes

- Tied for 2nd in Brooklyn
- 8 pedestrian crashes in 2009

Location/Context

- Project Area: 180-foot-wide parkway intersects 40-foot-wide street
- Neighborhood: Crown Heights
- Community Boards: 8 and 9
- Council District: 41
- Land Use: Retail and residential
- Bus Routes: B17, B46
- Subway: #3 and #4 at Utica Avenue
- Local Truck Routes: Utica Avenue
- Bike Routes: Existing path on Eastern Parkway

Issues Identified

- Heavy pedestrian and vehicle volumes
- Pedestrian/vehicle conflicts
- Long crossing distances
- Poor compliance by pedestrians
- High retail-related pedestrian activity
- Protected Street until May 2014 (Utica Avenue south of Eastern Parkway)

Implemented Improvements

- Installed pedestrian countdown signals
- Installed "LOOK" safety pavement markings at crosswalks to alert pedestrians to oncoming traffic



Projected Implemented Improvements

- Under study by NYCDOT for potential traffic calming project



BROOKLYN

4th Avenue & 39th Street

Crashes

- Tied for 2nd in Brooklyn
- 8 pedestrian crashes in 2009

Location/Context

- Project Area: 4th Avenue is 90 feet wide; 39th Street is only two-way cross street for several blocks; Priority School PS1 nearby
- Neighborhood: Sunset Park
- Community Board: 7
- Council District: 38
- Land Use: Retail, light industrial, residential
- Bus Routes: B35, B63, B70
- Local Truck Routes: 4th Avenue, 39th Street
- Adjacent to Borough Park Senior Pedestrian Focus Area

Issues Identified

- Heavy vehicle volumes
- Pedestrian/vehicle conflicts
- Long crossing distances
- Poor compliance by pedestrians
- Substandard turn bays with heavy turn volumes
- School-related congestion



Implemented Improvements

- **Installed new high visibility crosswalks** for better pedestrian visibility
- **Realigned crosswalks** for better pedestrian and vehicular visibility
- **Installed pedestrian countdown signals**
- **Installed “LOOK” safety pavement markings** at crosswalks to alert pedestrians to oncoming traffic



Before: Long crossing distances on 4th Avenue



After: Improved crossings across 4th Avenue

BROOKLYN

Flatbush Avenue & Avenue D

Crashes

- Tied for 3rd in Brooklyn
- 7 pedestrian crashes in 2009

Location/Context

- Project Area: Two streets meet on Flatbush Avenue
- Neighborhood: Flatbush
- Community Board: 14
- Council District: 40 and 45
- Land Use: Primarily residential, but heavy retail on Flatbush Avenue
- Bus Routes: B41, B103, BM2
- Through Truck Routes: Flatbush Avenue

Issues Identified

- Pedestrians crossing where no crosswalk exists
- Heavy pedestrian and vehicle volumes
- Pedestrian/vehicle conflicts
- Poor compliance by pedestrians
- Long crossing distances
- Offset intersection with skewed crosswalks
- High retail-related pedestrian activity
- Disorganized traffic flow

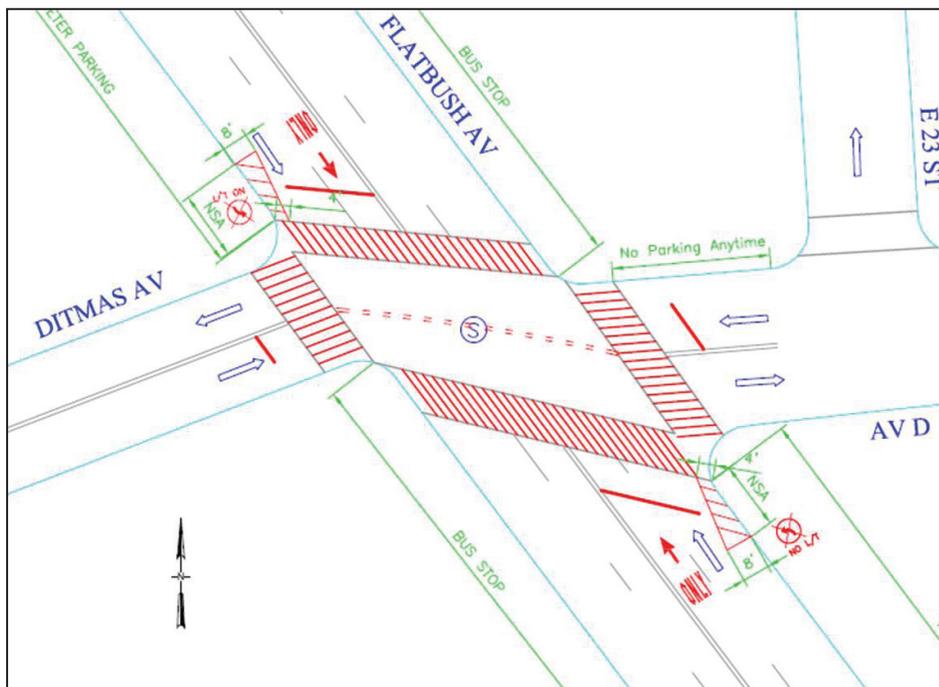


Implemented Improvements

- **Installed new high visibility crosswalks** for better pedestrian visibility
- **Installed pedestrian countdown signals**
- **Installed “LOOK” safety pavement markings** at crosswalks to alert pedestrians to oncoming traffic

Projected Implemented Improvements

- **Under study by NYCDOT for potential traffic calming project**
- **Ban NB left turn from Flatbush Avenue and WB left turn from Avenue D** to reduce pedestrian and vehicle conflicts
- **Daylight SE and NW corners** of Flatbush Avenue to reduce double parking near intersection



Proposed design for daylighting and left turn bans

BROOKLYN

5th Avenue & 34th Street

Crashes

- Tied for 3rd in Brooklyn
- 7 pedestrian crashes in 2009

Location/Context

- Project Area: T-intersection, next to Greenwood Cemetery, Retail/residential corridor
- Neighborhood: Sunset Park/Greenwood Heights
- Community Board: 7
- Council District: 38
- Land Use: Primarily residential with retail along 5th Ave
- Bus Routes: B63
- Bike Routes: Proposed bike route on 5th Avenue
- Subway: N/R at 36th St and 4th Ave

Issues Identified

- Heavy pedestrian and vehicle volumes

Implemented Improvements

- Installed pedestrian countdown signals
- Installed "LOOK" safety pavement markings at crosswalks to alert pedestrians to oncoming traffic



Projected Implemented Improvements

- Install parking stripe to calm corridor and reduce vehicle and pedestrian conflicts (spring 2013)



Before: Wide moving lanes on 5th Avenue

BROOKLYN

Flatbush Avenue & Nevins Street

Crashes

- Tied for 3rd in Brooklyn
- 7 pedestrian crashes in 2009

Location/Context

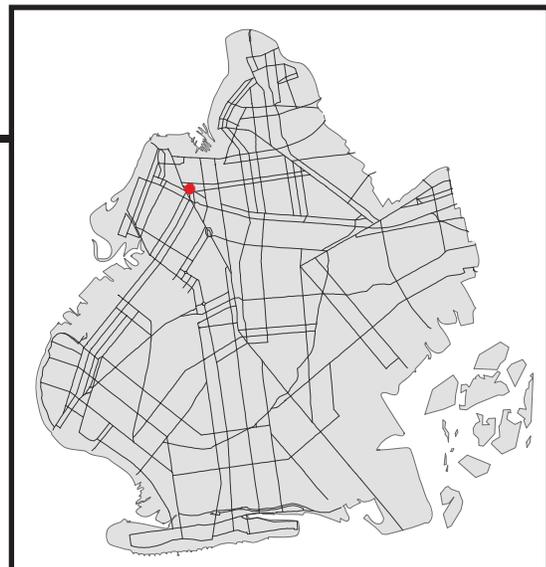
- Project Area: Skewed intersection with high pedestrian volumes
- Neighborhood: Downtown Brooklyn/Fort Greene
- Community Board: 2
- Council District: 33 and 35
- Land Use: Retail and commercial
- Bus Routes: B25, B26, B38, B52
- Subway Stations: 2/3/4/5 at Nevins Street, B/Q/R at Dekalb Avenue
- Through Truck Routes: Flatbush Avenue

Issues Identified

- Long crossing distances
- Pedestrian/vehicle conflicts
- Heavy pedestrian and vehicle volumes
- Poor compliance by pedestrians
- Pedestrians crossing where no crosswalk exists
- High retail-related pedestrian activity
- Skewed intersection and crosswalks
- Most crashes involve left from WB Fulton Street and right from SB Flatbush Avenue onto SB Nevins Street

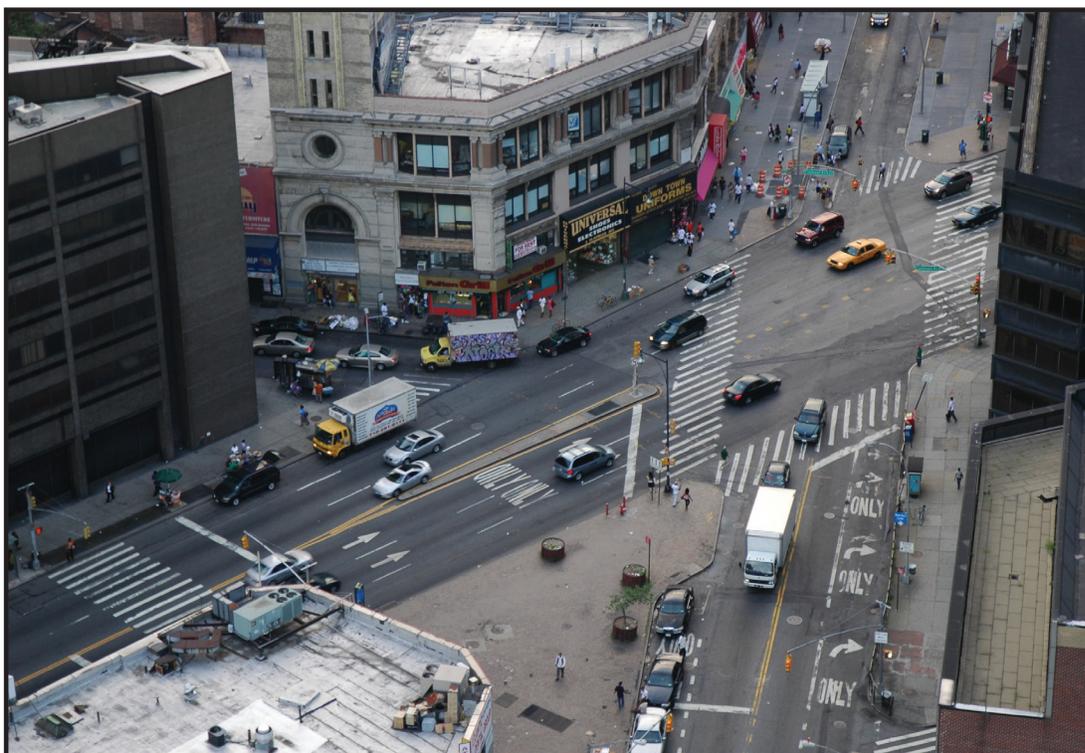
Implemented Improvements

- Installed Accessible Pedestrian Signal
- Installed pedestrian countdown signals
- Installed “LOOK” safety pavement markings at crosswalks to alert pedestrians to oncoming traffic



Projected Implemented Improvements

- Construct curb extension on north corner of Nevins Street to shorten pedestrian crossings
- Adjacent to EDC and DOT Capital 2013 Fox Square plaza project



Before: Heavily skewed intersection of Flatbush Avenue and Nevins Street

BROOKLYN

8th Avenue & 60th Street

Crashes

- Tied for 3rd in Brooklyn
- 7 pedestrian crashes in 2009

Location/Context

- Project Area: Intersection on wide, congested retail corridor
- Neighborhood: Sunset Park
- Community Boards: 7 and 12
- Council District: 38
- Land Use: Retail, residential
- Bus Routes: B9, B70
- Intersection within Borough Park Senior Area

Issues Identified

- Heavy pedestrian and vehicle volumes
- Pedestrian/vehicle conflicts
- Poor compliance by pedestrians
- High retail-related pedestrian activity
- Heavy truck loading

Implemented Improvements

- **Installed curb extension** on the NE corner to shorten pedestrian crossings
- **Installed new high visibility crosswalks** for better pedestrian visibility
- **Installed pedestrian countdown signals**
- **Installed "LOOK" safety pavement markings** at crosswalks to alert pedestrians to oncoming traffic

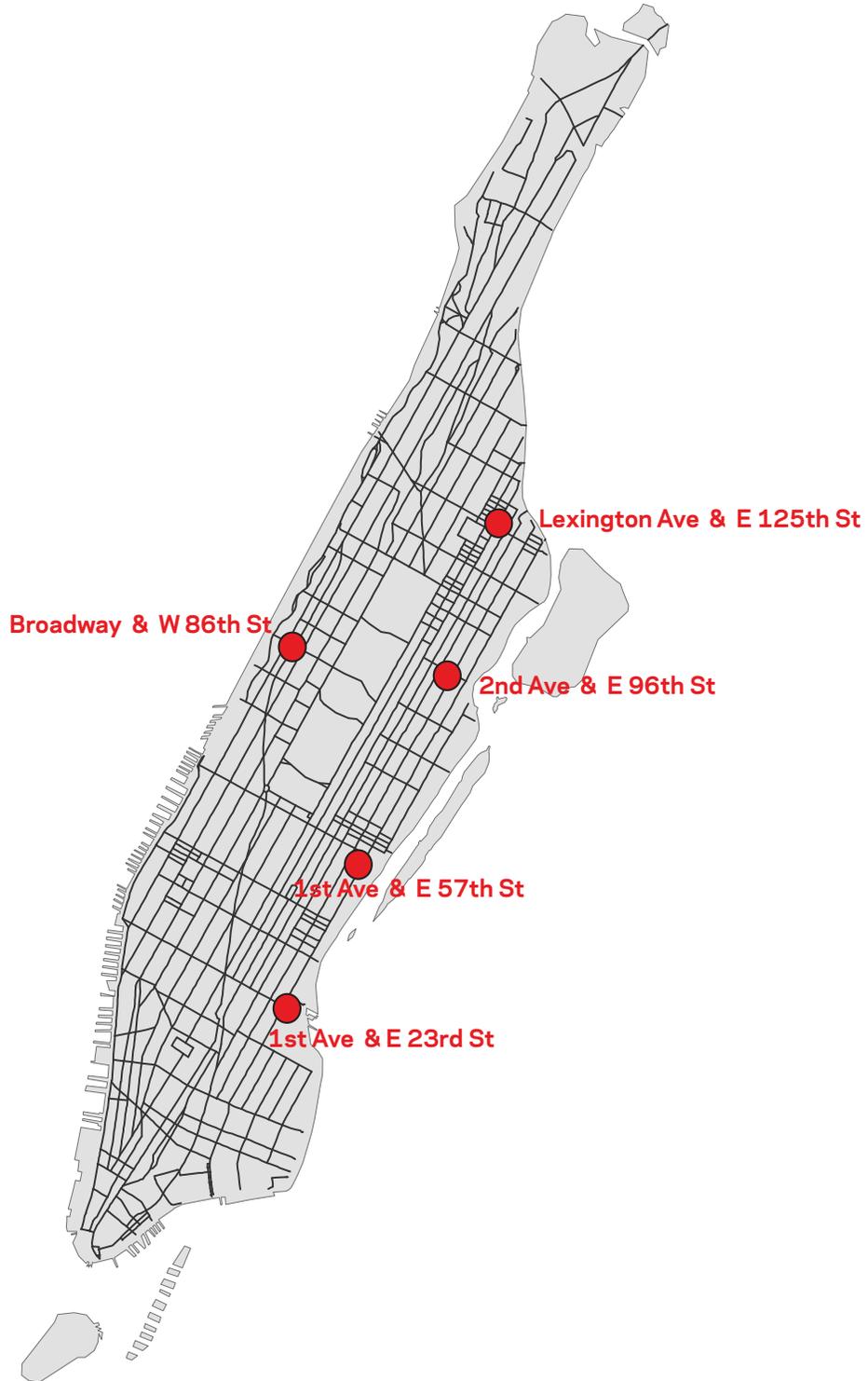


Before: High occurrence of pedestrian and vehicle conflicts



After: Curb extension shortens crossing distances for pedestrians and slows turning vehicles

MANHATTAN



MANHATTAN

1st Avenue & East 23rd Street

Crashes

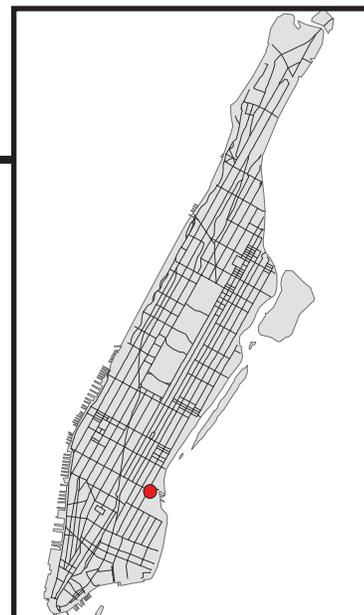
- Ranked 1st in Manhattan
- 14 pedestrian crashes in 2009

Location/Context

- Project Area: Heavy ground floor retail, FDR access, Bellvue Hospital Center nearby
- Neighborhood: Gramercy
- Community Board: 6
- Council Districts: 2 and 4
- Land Use: Primarily mixed use, residential and institutional
- Bus Routes: M14A, M14D, M15
- Through Truck Routes: 1st Avenue, 23rd Street
- Bike Routes: Existing parking protected bicycle path on 1st Avenue

Issues Identified

- Heavy vehicle volumes
- Long crossing distances



Implemented Improvements

- Part of SBS Project along 1st Avenue
- **Constructed pedestrian safety island** in the north crosswalk to reduce crossing distance
- **Planted trees** on island to improve the streetscape
- **Banned left turns** from 23rd Street to 1st Avenue to reduce vehicle and pedestrian conflicts
- **Modified signal timing** to include new bicycle signal to provide safer crossing for bicycles
- **Installed new high visibility crosswalks** for better pedestrian visibility
- **Installed peg-a-tracks** to safely guide vehicles through the intersection
- **Installed pedestrian countdown signals**
- **Installed "LOOK" safety pavement markings at crosswalks to alert pedestrians to on-coming traffic**



After: Pedestrian safety island reduces crossing distance and potential conflicts

MANHATTAN

Lexington Avenue & East 125th Street

Crashes

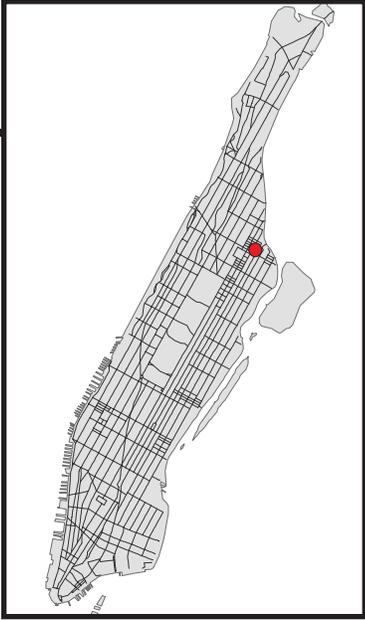
- Ranked 2nd in Manhattan
- 11 pedestrian crashes in 2009

Location/Context

- Project Area: Busy retail corridor with high pedestrian volumes
- Neighborhood: Harlem
- Community Board: 11
- Council District: 8
- Land Use: Primarily commercial, along with residential and institutional
- Subway: 4/5/6 at 125th Street
- Train: Metro North stop at E125 and Park Ave
- Bus Routes: M60, M100, M101, Bx15, M103
- Local Truck Routes: 125th Street and Lexington Avenue

Issues Identified

- Heavy pedestrian and vehicle volumes
- Pedestrian and vehicle conflicts
- High retail-related pedestrian activity



Implemented Improvements

- Installed pedestrian countdown signals
- Installed "LOOK" safety pavement markings at crosswalks to alert pedestrians to oncoming traffic

Projected Implemented Improvements

- Part of ongoing SBS study along 125th Street



MANHATTAN

2nd Avenue & East 96th Street

Crashes

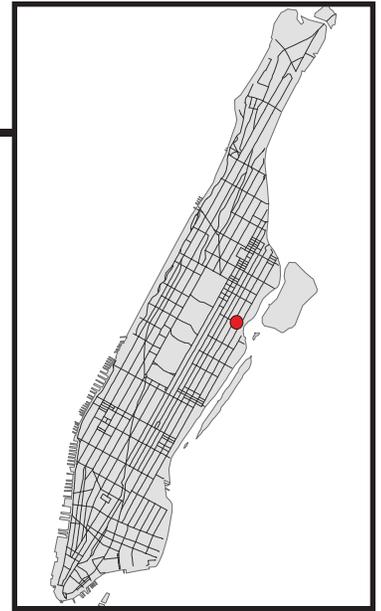
- Tied for 3rd in Manhattan
- 8 pedestrian crashes in 2009

Location/Context

- Project Area: Second Avenue subway construction
- Neighborhood: Upper East Side
- Community Board: 8 and 11
- Council District: 4 and 8
- Land Use: Mixed use, residential with ground floor commercial
- Bus Routes: M15 SBS/Local
- Local Truck Routes: 2nd Avenue, 96th Street
- Bike Routes: Potential route on 2nd Avenue

Issues Identified

- Long crossing distances
- Heavy pedestrian traffic
- Heavy vehicle traffic

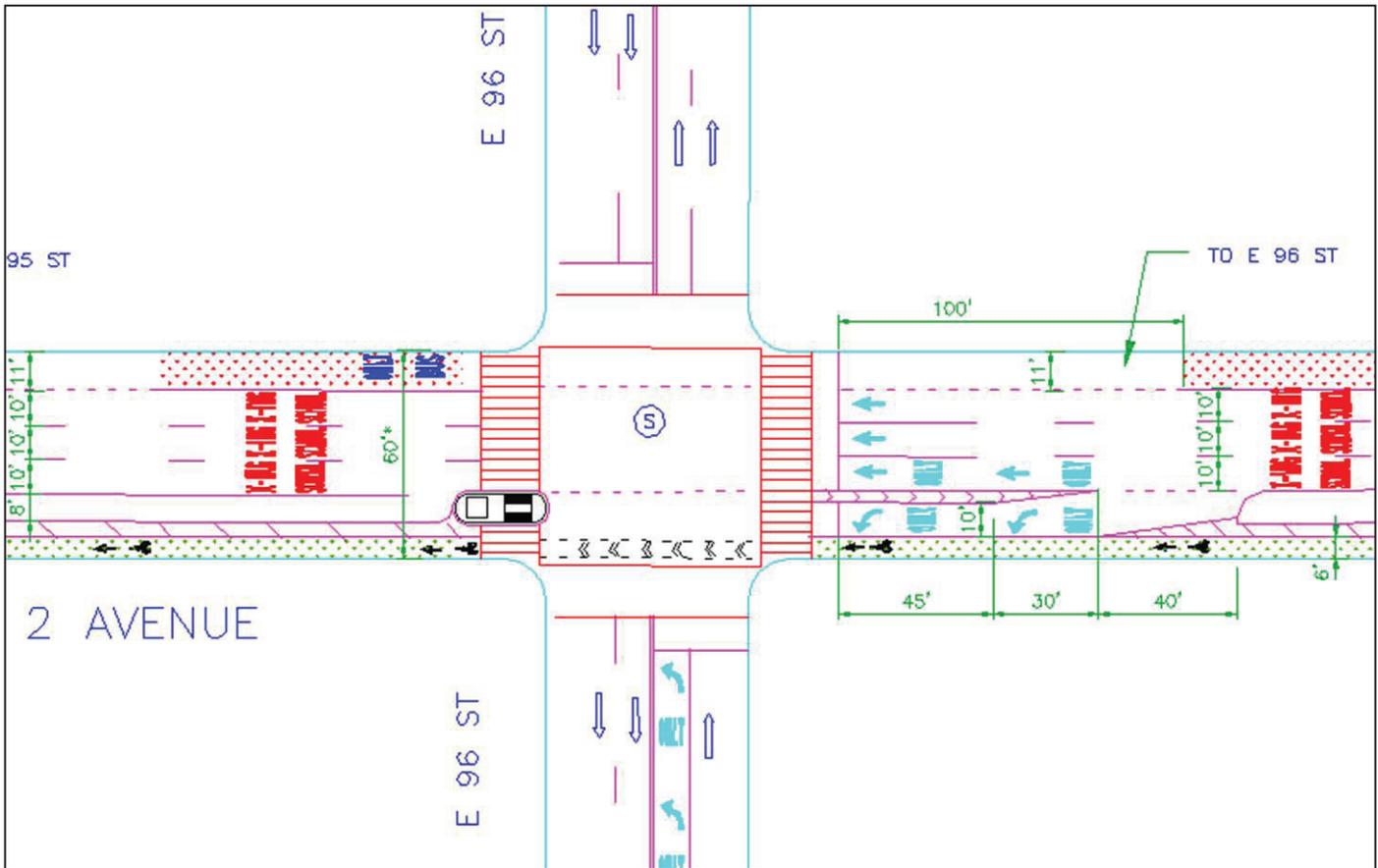


Implemented Improvements

- Installed pedestrian countdown signals
- Installed "LOOK" safety pavement markings at crosswalks to alert pedestrians to oncoming traffic

Projected Implemented Improvements

- Future improvements planned after completion of 2nd Avenue subway



Example of proposed design for 2nd Avenue

MANHATTAN

1st Avenue & East 57th Street

Crashes

- Tied for 3rd in Manhattan
- 8 pedestrian crashes in 2009

Location/Context

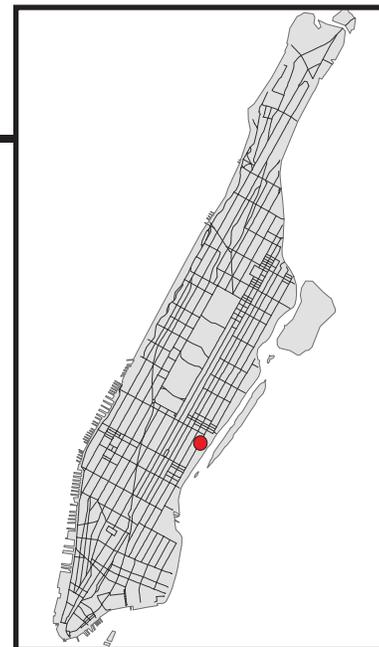
- Project Area: Heavy traffic leading to Queensboro Bridge
- Neighborhood: Sutton Place
- Community Board: 6
- Council District: 5
- Land Use: Mixed use, ground floor commercial, high-rise residential
- Bus Routes: M15 SBS/Local
- Through Truck Routes: 1st Avenue, 57th Street
- Bike Routes: Potential route on 1st Avenue

Issues Identified

- Heavy vehicle volumes
- Long crossing distances

Implemented Improvements

- **Installed northbound left turn arrow** on 1st Avenue to help organize turns and reduce pedestrian-vehicle conflicts
- **Modified signal timing** (split phase) to accommodate heavy left turns
- **Installed pedestrian countdown signals**
- **Installed "LOOK" safety pavement markings** at crosswalks to alert pedestrians to oncoming traffic



Projected Implemented Improvements

- **Install shared bicycle lane and a SBS bus lane on 1st Avenue**



After: Left turn phase from 1st Avenue to 57th Street

Future shared bicycle lane on 1st Avenue

MANHATTAN

Broadway & West 86th Street

Crashes

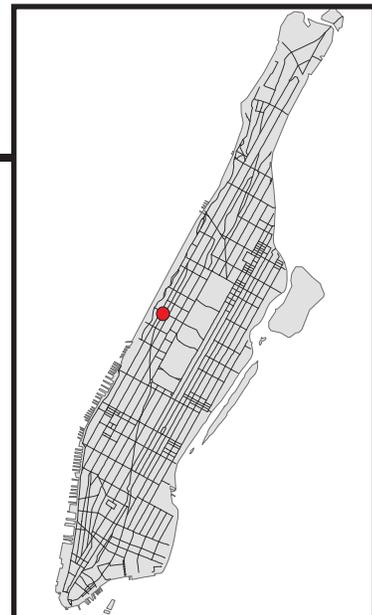
- Tied for 3rd in Manhattan
- 8 pedestrian crashes in 2009

Location/Context

- Project Area: Retail corridor along Broadway, residential along 86th Street
- Neighborhood: Upper West Side
- Community Board: 7
- Council District: 6
- Land Use: Commercial on Broadway, retail on W86th Street
- Bus Routes: M86, M104
- Local Truck Routes: Broadway, 86th Street

Issues Identified

- Long crossing distances
- Heavy pedestrian volumes
- Heavy vehicle volumes
- Pedestrian/vehicle conflicts
- Poor compliance by pedestrians
- High retail-related activity



Implemented Improvements

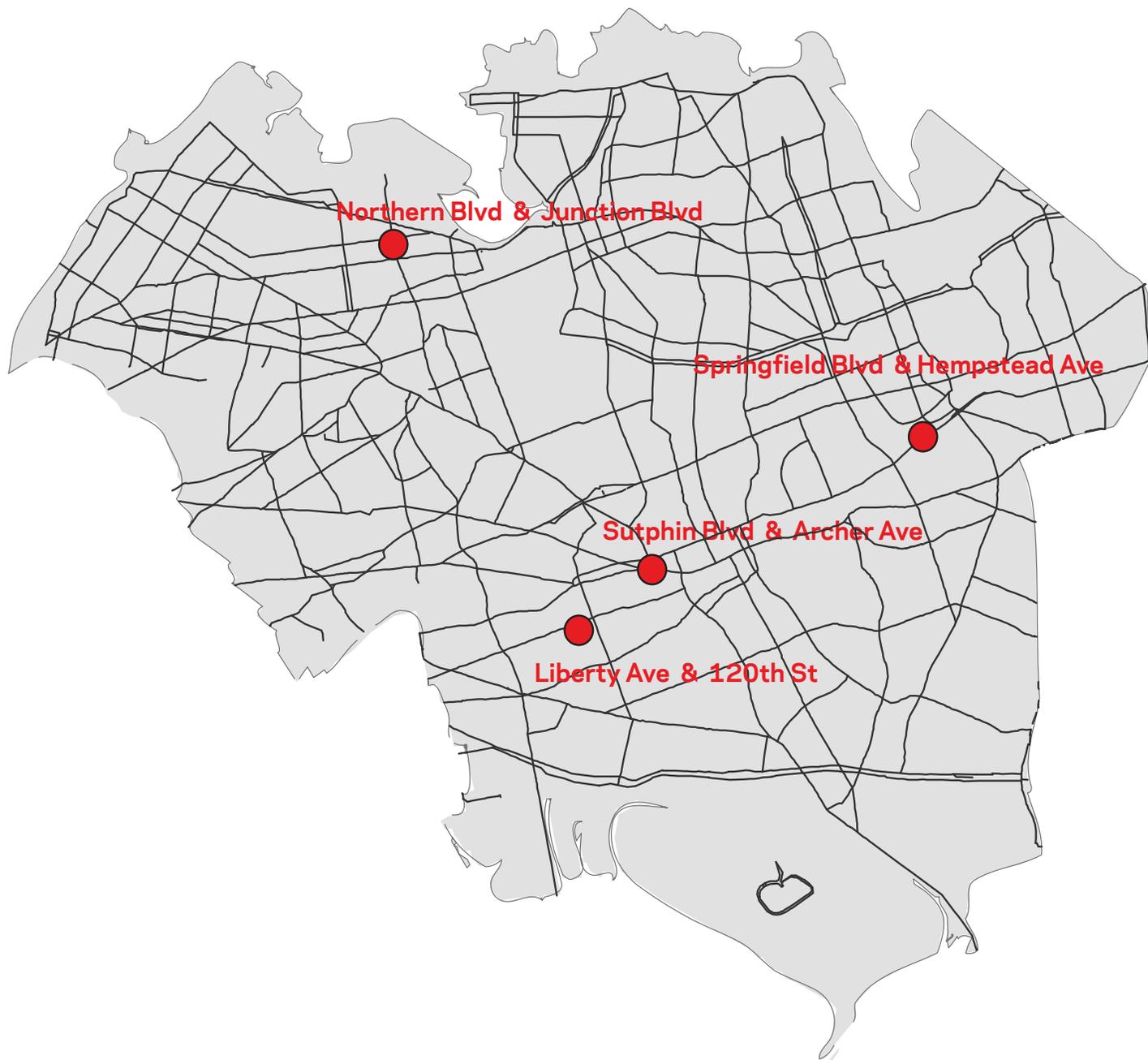
- Installed curved pedestrian wall on median tip
- Installed pedestrian countdown signals
- Installed “LOOK” safety pavement markings at crosswalks to alert pedestrians to oncoming traffic

Projected Implemented Improvements

- Ban NB left turn from Broadway and EB left turn from West 86 Street to reduce vehicle and pedestrian conflicts visibility
- Install new high visibility crosswalks for better pedestrian visibility (spring 2013)



QUEENS



QUEENS

Springfield Boulevard & Hempstead Ave

Crashes

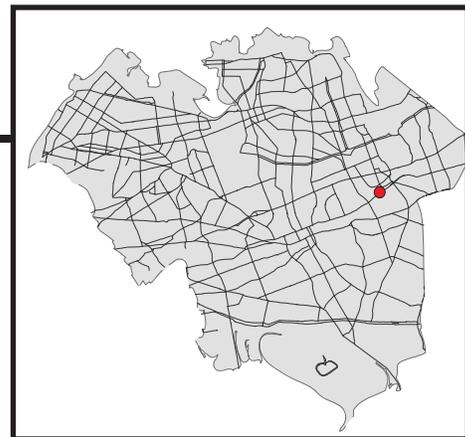
- Tied for 1st in Queens
- 7 pedestrian crashes in 2009

Location/Context

- Project Area: Neighborhood retail on corner; medium density housing mid-block
- Neighborhood: Queens Village
- Community Board: 13
- Council District: 27
- Land Use: Mixed Use, commercial, 1&2-family residential
- Bus Routes: Q83, Q27, Q2, Q110
- Through Truck Routes: Springfield Blvd, Hempstead Ave

Issues Identified

- Heavy vehicle volumes
- Pedestrian-vehicle conflicts
- Long crossing distances
- Poor compliance by pedestrians
- Speeding on Hmpstead Ave, approaching Springfield
- 75 percent of pedestrians are hit crossing with signal (vehicle failure to yield)

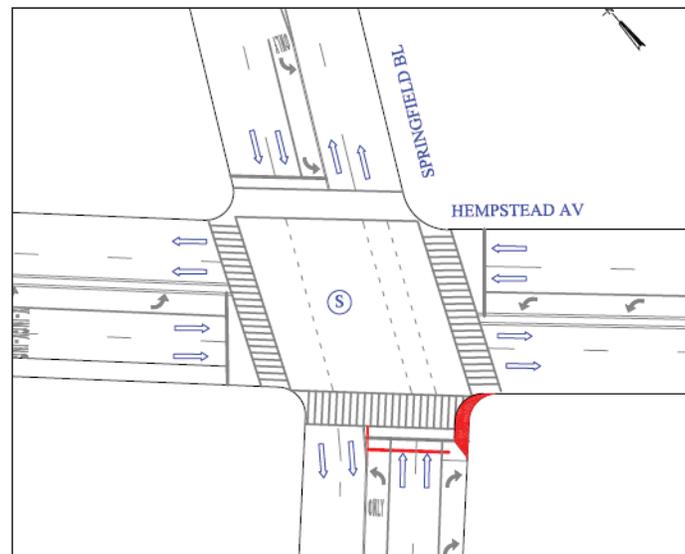


Implemented Improvements

- **Installed leading pedestrian intervals** to provide pedestrians with more conflict-free crossing time
- **Installed pedestrian countdown signals**
- **Installed “LOOK” safety pavement markings** at crosswalks to alert pedestrians to oncoming traffic

Projected Capital Implemented Improvements

- **Construct curb extension** on SE corner to shorten pedestrian crossing distances (DDC 2013/14)



Before: Long crossing distances across Hempstead Avenue

Proposed design for SE curb extension

QUEENS

Sutphin Boulevard & Archer Avenue

Crashes

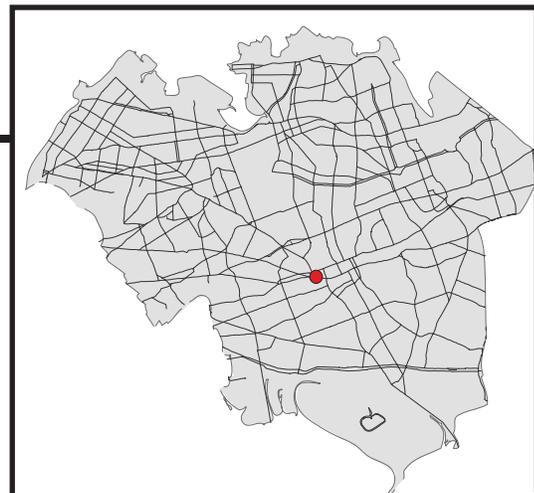
- Tied for 1st in Queens
- 7 pedestrian crashes in 2009

Location/Context

- Project Area: Retail corridor, Sutphin Blvd BID, and transit center with LIRR, AirTrain, bus, and E/J/Z subway
- Neighborhood: Jamaica Center
- Community Board: 12
- Council District: 24 and 27
- Land Use: Commercial with some industrial use, transportation facilities
- Bus Routes: Q6, Q8, Q9, Q20A/B, Q24, Q25, Q30, Q31, Q34, Q40, Q41, Q43, Q44, Q54, Q56, Q60, Q65
- Bike Routes: Future route planned on Archer Avenue

Issues Identified

- Major intermodal hub
- High number of turning vehicles failing to yield
- Skewed intersection
- Heavy pedestrian and vehicle volumes

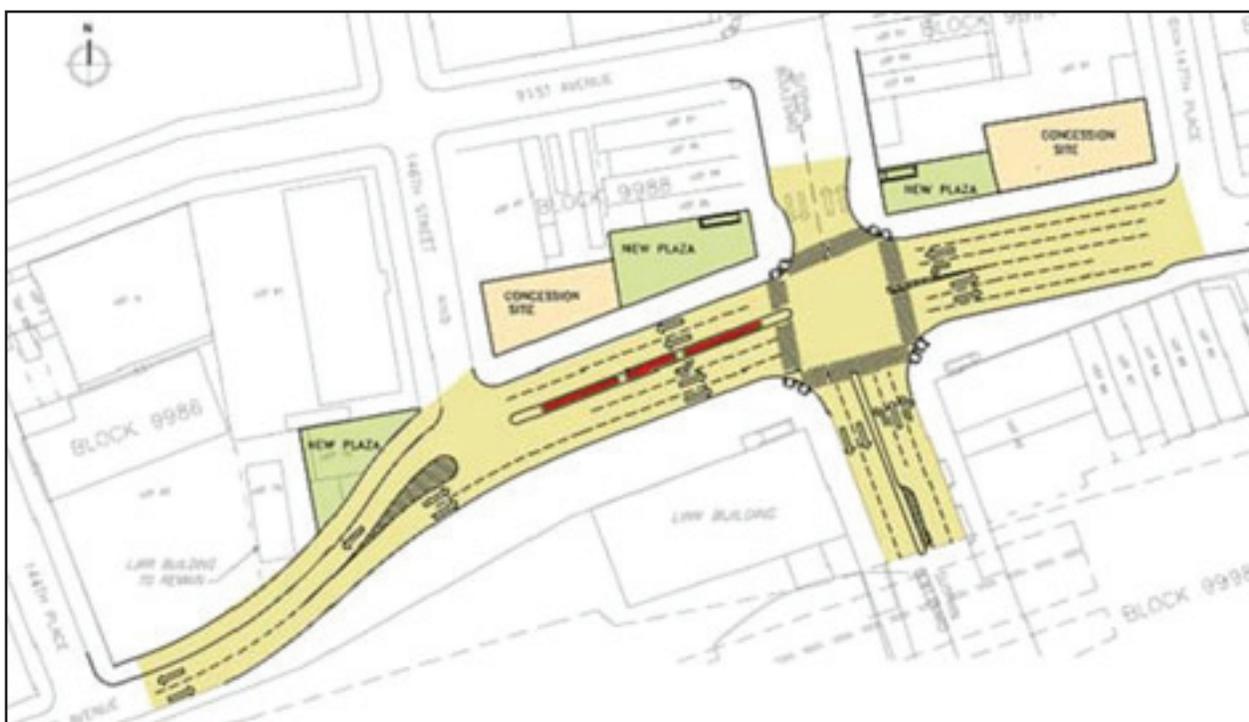


Implemented Improvements

- Installed pedestrian countdown signals
- Installed "LOOK" safety pavement markings at crosswalks to alert pedestrians to oncoming traffic

Projected Implemented Improvements

- Adjust lane designation markings to organize traffic flow
- Part of EDC 2013-14 Station Plaza project to realign and widen Archer Avenue to create bus turning lanes and sidewalks
- Construct public plazas and relocate subway exits on Sutphin Boulevard to improve pedestrian refuge space and shorten crossing distances



EDC project design

QUEENS

Liberty Avenue & 120th Street

Crashes

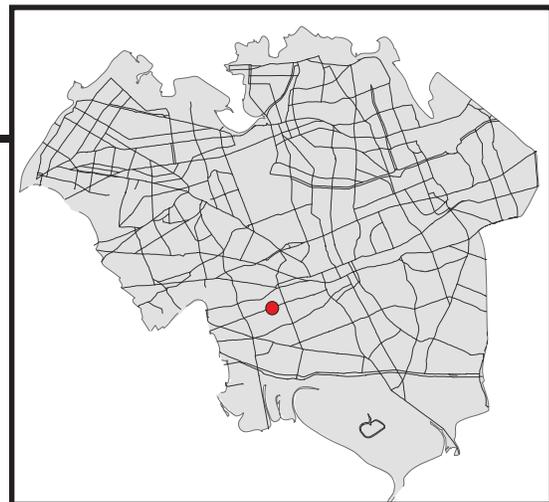
- Tied for 1st in Queens
- 7 pedestrian crashes in 2009

Location/Context

- Project Area: Wide one-way low-density residential street intersecting with busy retail corridor
- Neighborhood: South Richmond Hill
- Community Board: 10
- Council District: 28
- Land Use: 1&2-family Residential (120th Street), Mixed Use, Commercial (Liberty Ave)
- Bus Routes: Q112

Issues Identified

- Heavy pedestrian and vehicle volumes
- Pedestrian/vehicle conflicts
- Poor compliance by pedestrians
- High retail-related pedestrian activity
- Offset intersection with skewed crosswalks
- Over 50 percent of pedestrian crashes are failure to yield (crossing with the signal)



Implemented Improvements

- Installed pedestrian countdown signals
- Installed “LOOK” safety pavement markings at crosswalks to alert pedestrians to oncoming traffic

Projected Implemented Improvements

- Daylight NE corner of 120th St to improve sightlines near intersection
- Install new high visibility crosswalks for better pedestrian visibility (spring 2013)



Before: Liberty Avenue and 120 Street Looking south

QUEENS

Northern Boulevard & Junction Blvd

Crashes

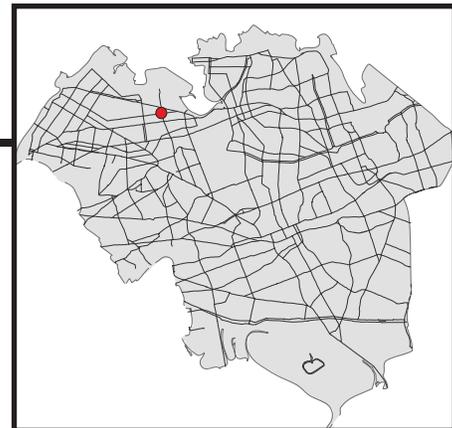
- Ranked 2nd in Queens
- 6 pedestrian crashes in 2009

Location/Context

- Project Area: Wide roadway near near busy school area (PS 228)
- Neighborhood: East Corona
- Community Board: 3
- Council District: 21 and 25
- Land Use: Mixed use, 1&2-family Residential, Multi-family Resident, Commercial, Institutional, Open Space
- Local Truck Routes: Junction Boulevard
- Through Truck Routes: Northern Boulevard

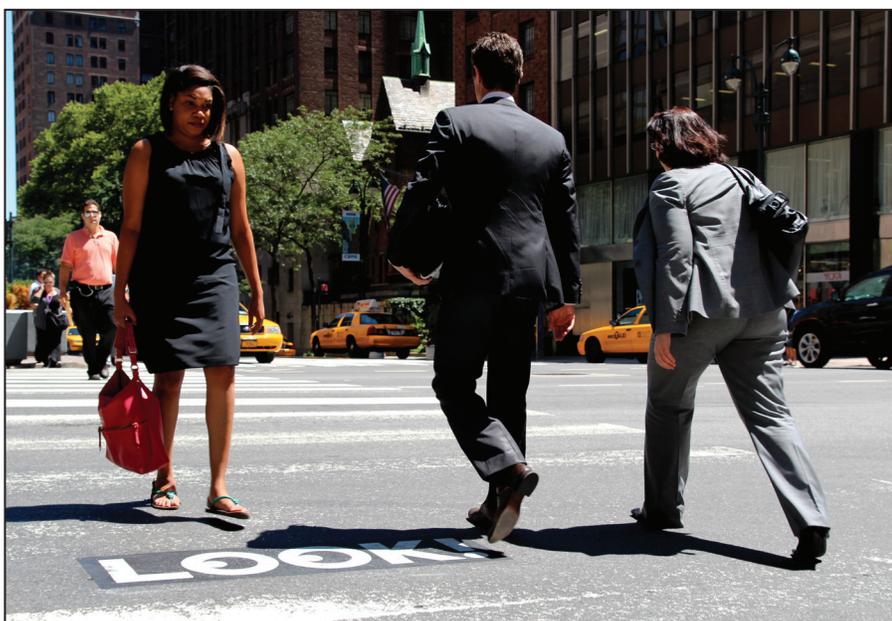
Issues Identified

- School-related congestion
- Heavy pedestrian volumes
- Long crossing distances



Implemented Improvements

- Installed pedestrian countdown signals
- Installed “LOOK” safety pavement markings at crosswalks to alert pedestrians to oncoming traffic



STATEN ISLAND



STATEN ISLAND

Hylan Boulevard & Guyon Avenue

Crashes

- Ranked 1st in Staten Island
- 4 pedestrian crashes in 2009

Location/Context

- Project Area: Residential area
- Neighborhood: Oakwood
- Community Board: 3
- Council District: 50
- Land Use: 1&2-Family Residential, Mixed Use, Commercial, Institutional
- Bus Routes: S57, S78, S79, X1, X4, X5, X7, X8, X24
- Local Truck Routes: Hylan Boulevard
- Subway: Oakwood Heights stop nearby
- Bike Routes: Planned/Proposed Class 2 lanes on Hylan Boulevard and Guyon Avenue
- P.S. 50 Frank Hankinson School nearby

Issues Identified

- Heavy vehicle volumes
- Heavy bus traffic

Implemented Improvements

- Installed pedestrian countdown signals
- Installed "LOOK" safety pavement markings at crosswalks to alert pedestrians to oncoming traffic



Projected Implemented Improvements

- Install leading pedestrian interval to provide pedestrians with more conflict-free crossing

