

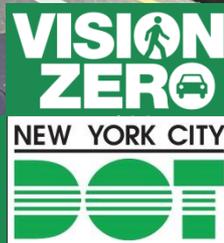
# Safe Streets for Seniors

## New York City

2015



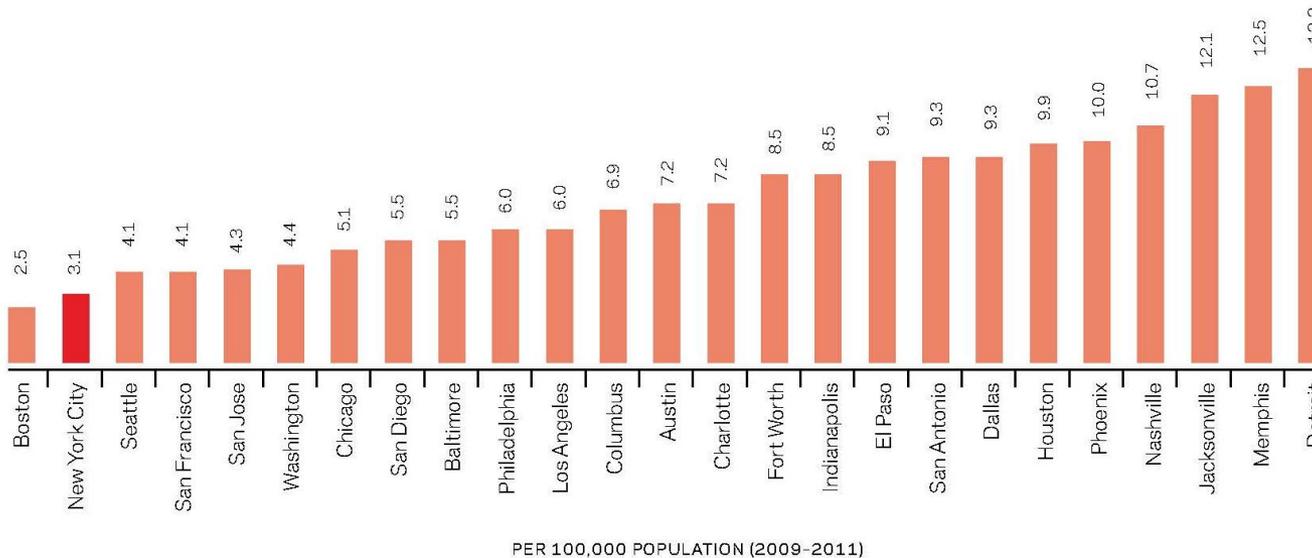
Chris Brunson, Project Manager; Research, Implementation & Safety Transportation  
New York City Department of Transportation - May 21, 2015



# New York City: By the numbers

- NYC population: 8.4 million (MSA 22.2 million)
- Extensive 24/7 subway and bus networks
- NYC traffic fatality rate: 3.1 per 100,000: Low among large US cities
  - Over 50% are pedestrians: High among large US cities
- Low car ownership; Everyone is a pedestrian

TRAFFIC FATALITY RATES OF 25 LARGEST US CITIES

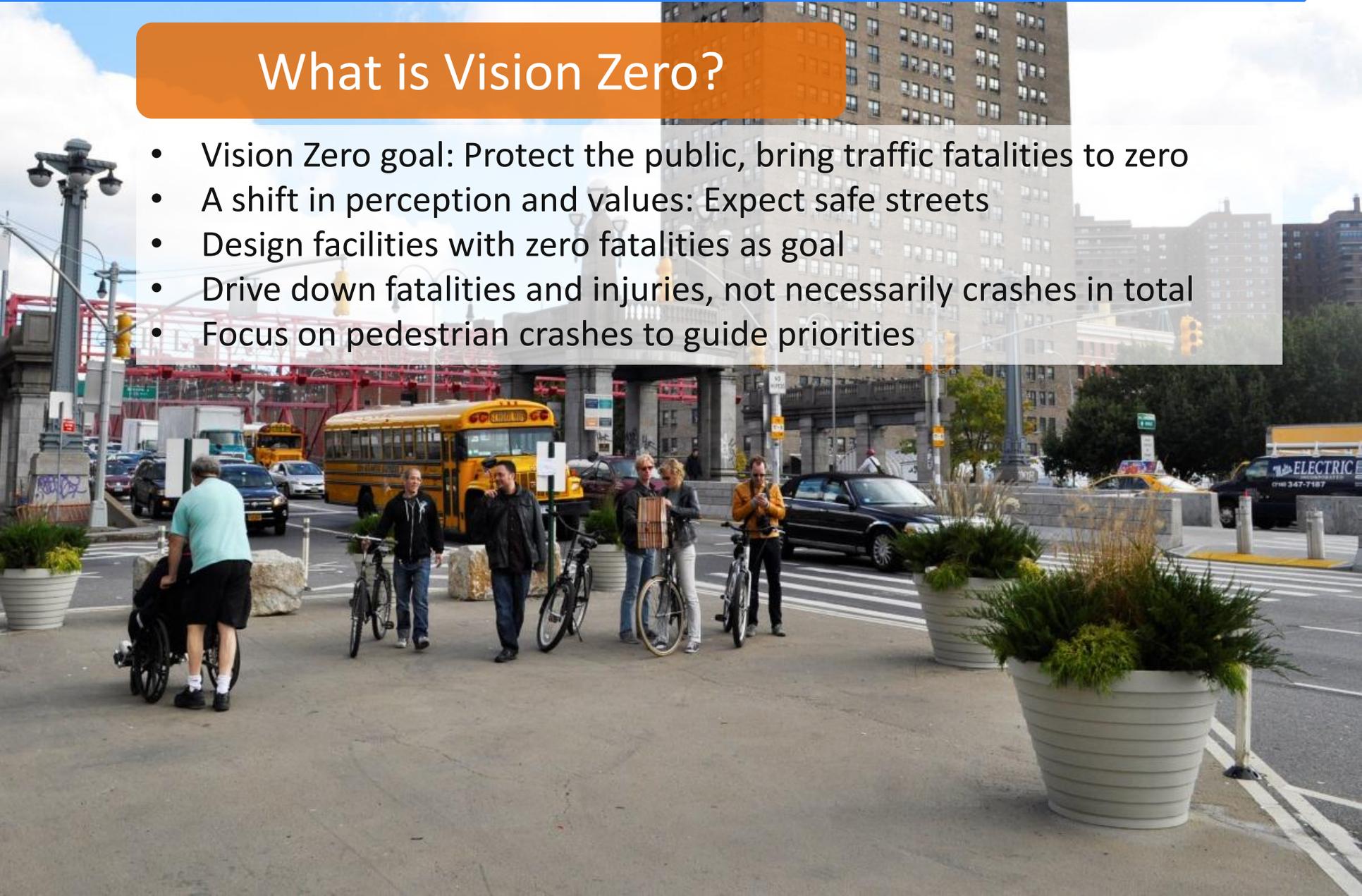


PER 100,000 POPULATION (2009-2011)



## What is Vision Zero?

- Vision Zero goal: Protect the public, bring traffic fatalities to zero
- A shift in perception and values: Expect safe streets
- Design facilities with zero fatalities as goal
- Drive down fatalities and injuries, not necessarily crashes in total
- Focus on pedestrian crashes to guide priorities



# Why Focus on Pedestrians?

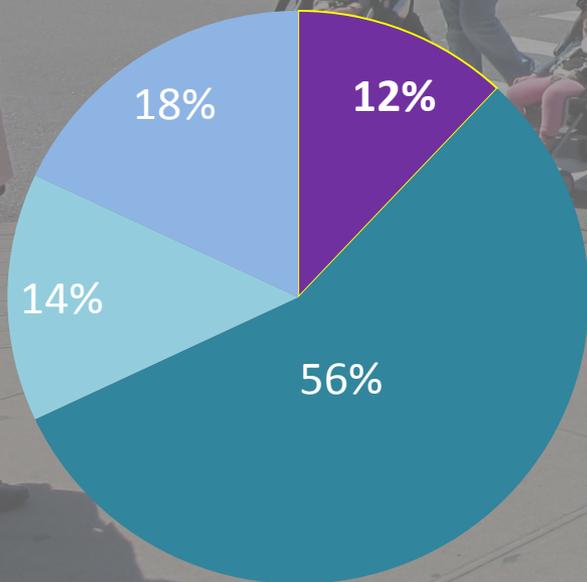


- The challenge of an aging city
  - Baby boomers are reaching retirement age
  - Seniors in NYC walk much more than those elsewhere in the US
  - Senior fatality rate 4X that of younger New Yorkers

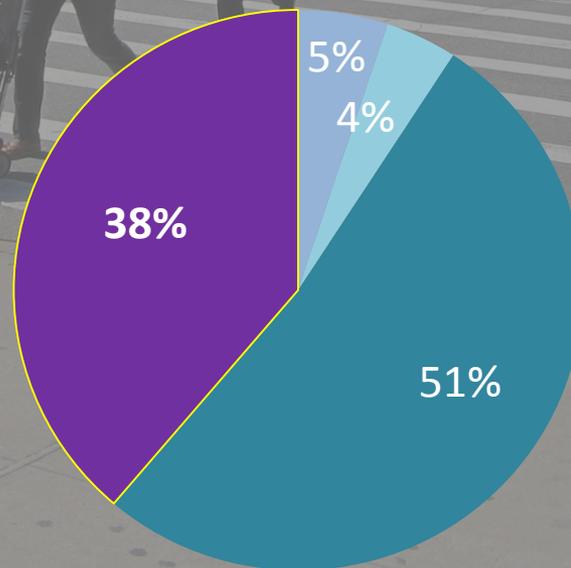
# Senior Pedestrians

- 12% of the NYC population are seniors
- 38% of NYC traffic fatalities are senior pedestrians

NYC Population



NYC Pedestrian Traffic Fatalities



- Children (0-14)
- Young Adults (15-24)
- Adults (25-65)
- Seniors (65+)

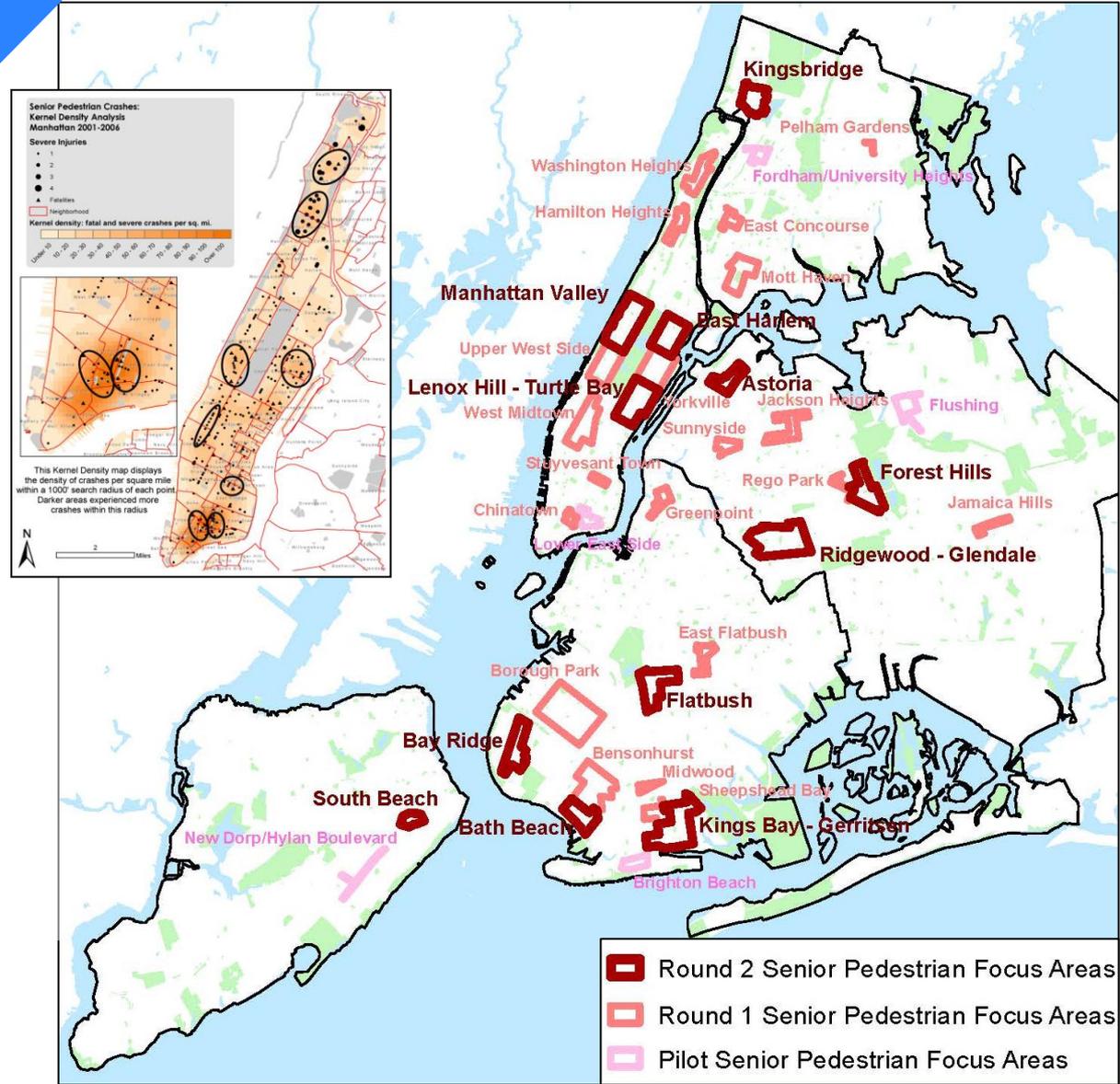
# Senior program began in 2008

## First 25 areas (2008)

- Mapped pedestrians age 65+ killed and severely injured (KSI)
- Circled clustering on heat map to identify first focus areas

## 12 new areas (2012)

- Also studied and included senior centers, housing, other spatial variables

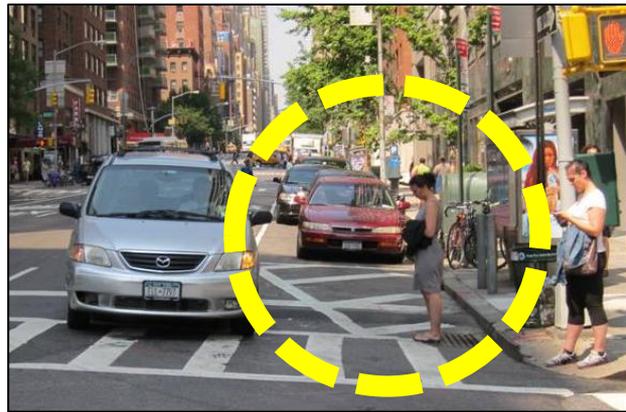


# Input from Senior Pedestrians

- Not enough time to cross the street
- Broken or missing pedestrian ramps
- Faded and hard-to-see markings
- Poor drainage or ponding in crosswalks
- Turning vehicles failing to yield



# Toolbox of Typical Safety Improvements



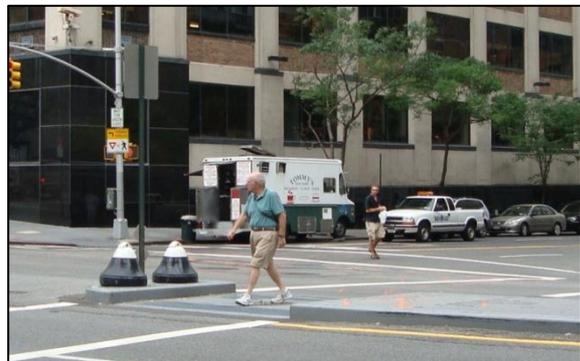
**Daylighting:**  
Better driver-pedestrian visibility



**Countdown Signals:**  
Tell pedestrians how much more time they have to cross



**Signal Timing:**  
Can add more time to cross where possible, LPIs, split phases



**Pedestrian Safety Islands:**  
Shortens crossings on wide streets, provides safer crossing



**Road Diet:**  
Organizes traffic, less speeding



**Sidewalk Extensions:**  
Shortens crossing distance, slows turning cars

# Toolbox (cont'd)



**Accessible Pedestrian Signals (APS):**  
Provide audible signal in areas with persons with vision impairments



**Repair Pedestrian Ramps:**  
Repair pedestrian ramps on intersections with safety projects



**Provide more time to cross:**  
Add more time to cross the street where possible



**Simplify intersection movements:**  
Ban low volume left turns that conflict with high volume crosswalks



**Close Slips/Normalize turns:**  
Creates safer turns and improves driver to pedestrian visibility



**Shorten crossing distances:**  
Narrow lanes and pedestrian crossings in large intersections

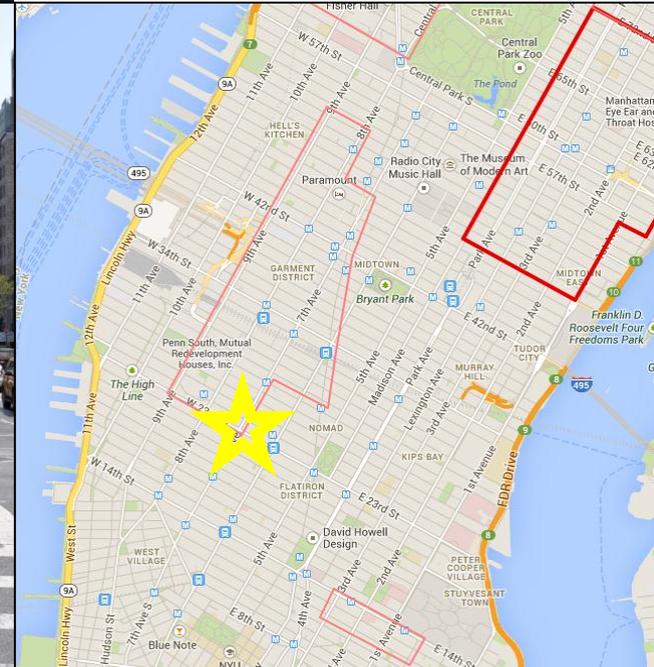
# Safety Improvements at Key Intersections



## W 23<sup>rd</sup> St/7<sup>th</sup> Ave (2010)

### Location:

- Chelsea, Manhattan
- Truck Routes
- Subway: 1-train
- High pedestrian volumes
- Near American Foundation for the Blind
- Near Penn South NORC



# Safety Improvements at Key Intersections

## 7th Ave and W 23rd St, Manhattan

- Pedestrian injuries down by **68%**

### Midtown West Senior Area



Before



Modified signal timing to add protected pedestrian crossing

Installed two pedestrian safety islands

Created separated left turns

Accessible Pedestrian Signal (APS) installed

After



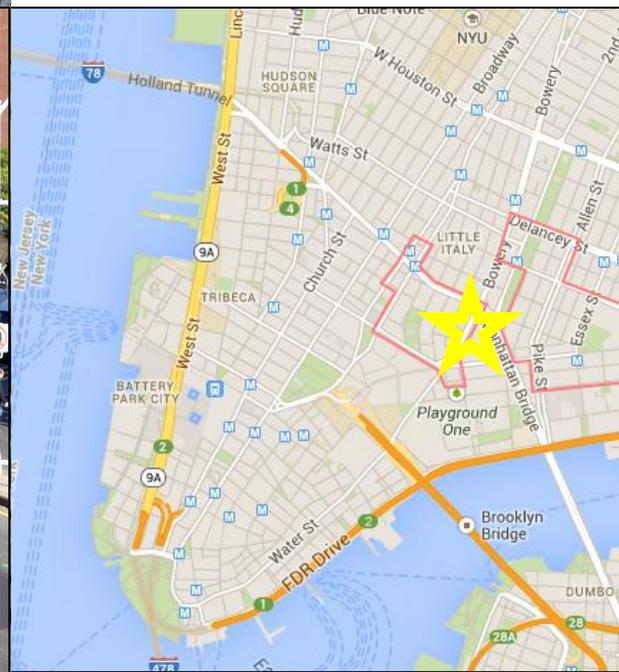
# Safety Improvements Near Housing



## Bowery (2010)

### Location:

- **Chinatown, Manhattan**
- Truck Routes
- Heavy traffic on Canal between Holland Tunnel and Manhattan Bridge
- Very high pedestrian volumes

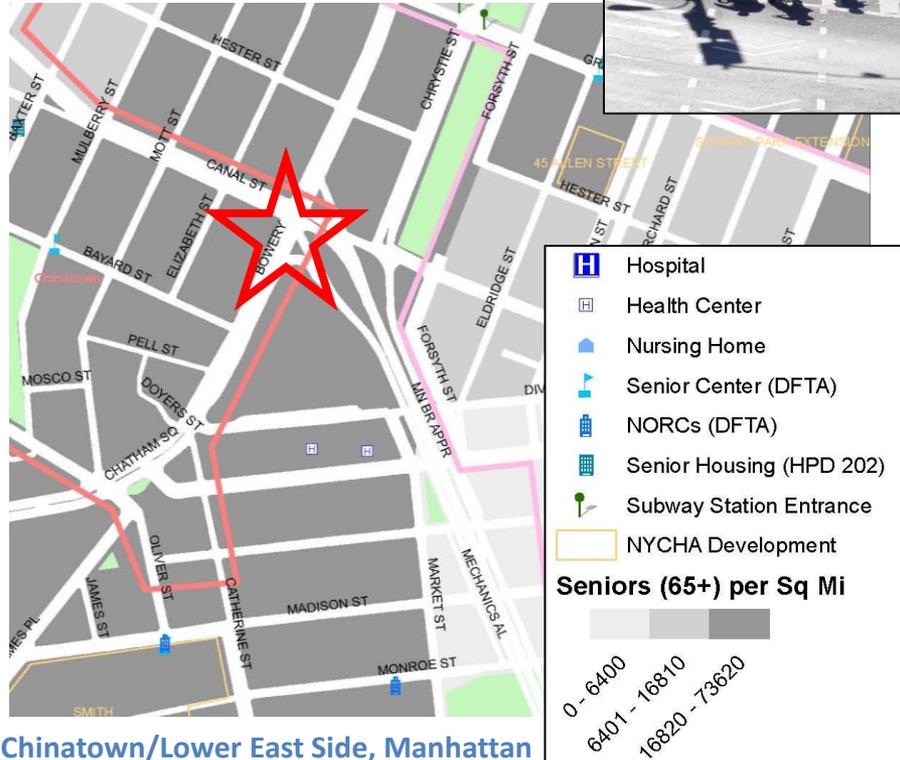


# Safety Improvements Near Housing

## Bowery, Manhattan

- Pedestrian injuries reduced by **39%**

Better organized and calmed Bowery traffic



Added planted median between Canal and Division



Bowery at Canal St (Manhattan Bridge entrance), looking south

# Safety Improvements on Arterials



## Context: Columbus Ave

### Location:

- Upper West Side, Manhattan
- Truck Route, Bus Route
- Near Subway: B/C trains
- High pedestrian volumes
- Goddard Riverside NORC and Senior Center, Park West Village NORC



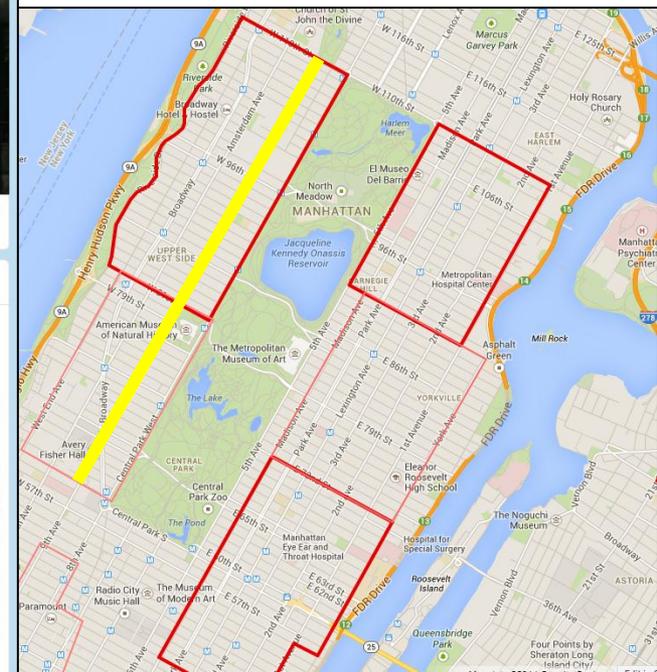
TWEETS 1,219 FOLLOWING 921 FOLLOWERS 744 [Follow](#)

### Tweets

Retweeted by Goddard Riverside  
**Helen Rosenthal** @HelenRosenthal · May 9  
Thrilled and grateful that @GoddardRiv green keepers are planting outside my office! @efrost1 @westsiderag pic.twitter.com/uEwXhvkewZ



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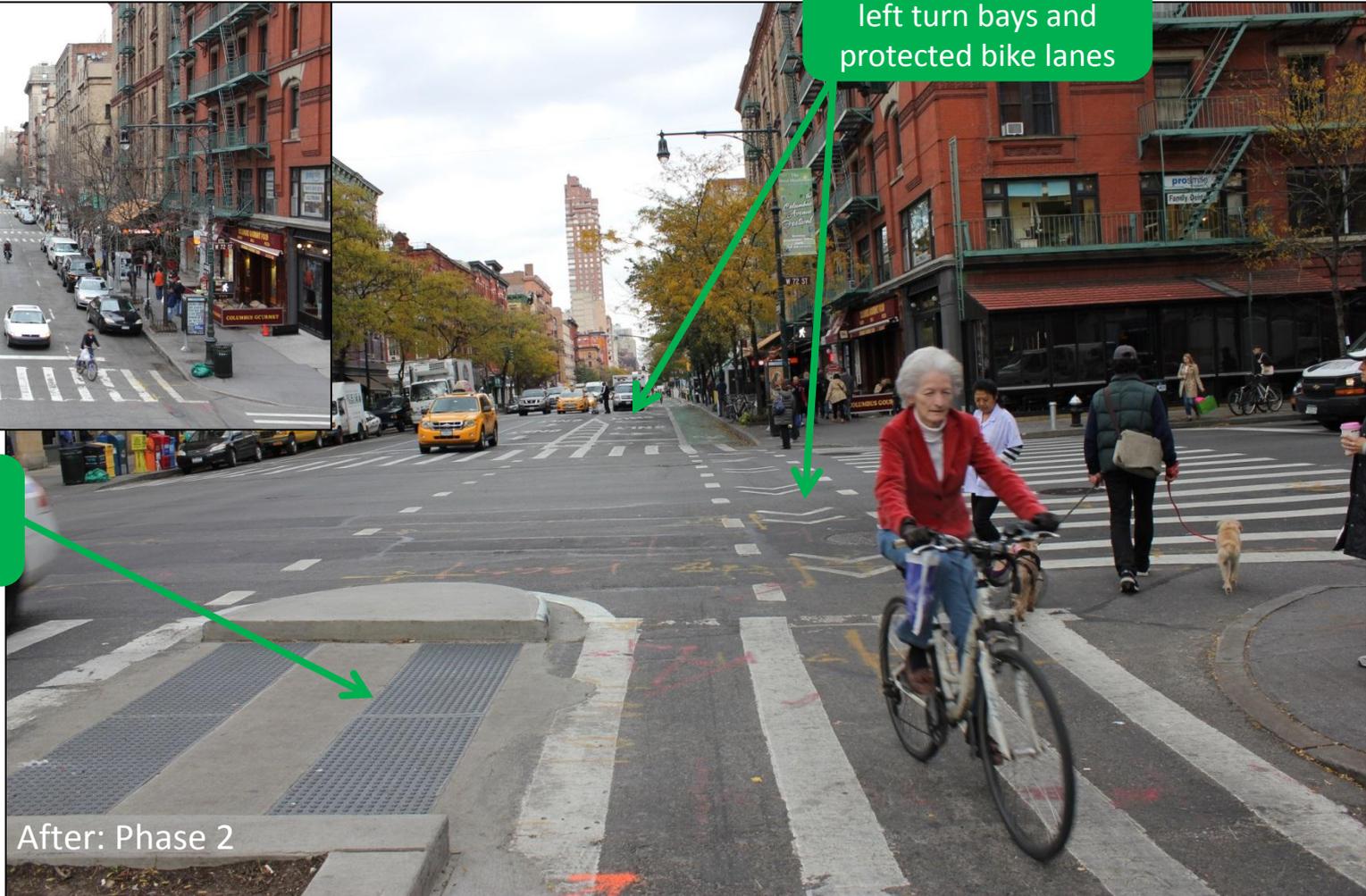


# Safety Improvements on Arterials

## Columbus Ave, Manhattan Phase 1 (W 77<sup>th</sup> to W 97<sup>th</sup> St)

- Pedestrian injuries down by **39%**

## Upper West Side Senior Area



Installed pedestrian safety islands

Created separated left turn bays and protected bike lanes

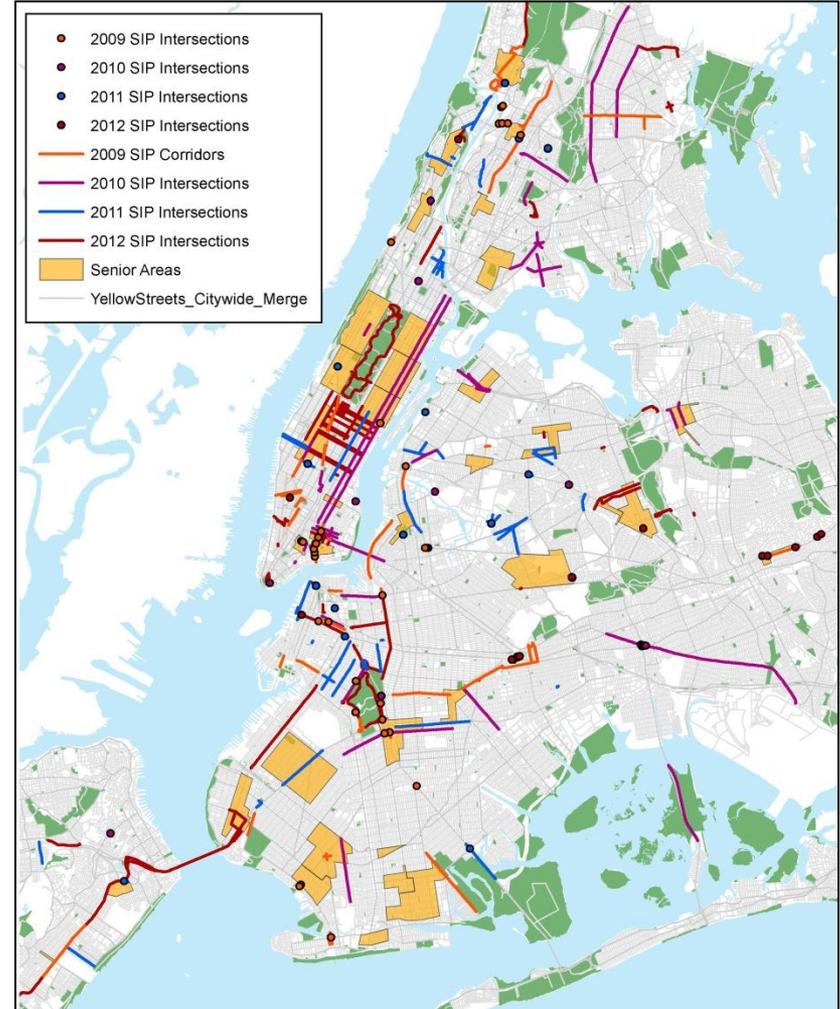
# Safety Improvements in Senior Areas

Since 2009:

- 59 Street Improvement Projects (SIPs) have been implemented in Senior Areas

Safety Findings\*

- 11% decrease in total injuries
- 9% decrease in pedestrian crashes
- 7% reduction in injury crashes



\*Based on before and after crash analysis of 2009-2012 SIPs which are within or on the border of a SPFA.

# CityBench Program

- Working with DOT's CityBench program
- Placing benches at strategic locations, such as:
  - Senior centers
  - Bus stops without shelters
  - Public libraries
  - Municipal facilities



*2<sup>nd</sup> Avenue bus stop, Manhattan*



*Self Help Austin St Senior Center in Forest Hills, Queens*

# Outreach with NYC Seniors

- Working with the NYC Department for the Aging
- Coordinating with NYCDOT's Safety Education Team
- Going into Senior Centers to get feedback
- Approaching Aging Committees on Community Boards for project ideas
- Working in coordination with Age-Friendly NYC

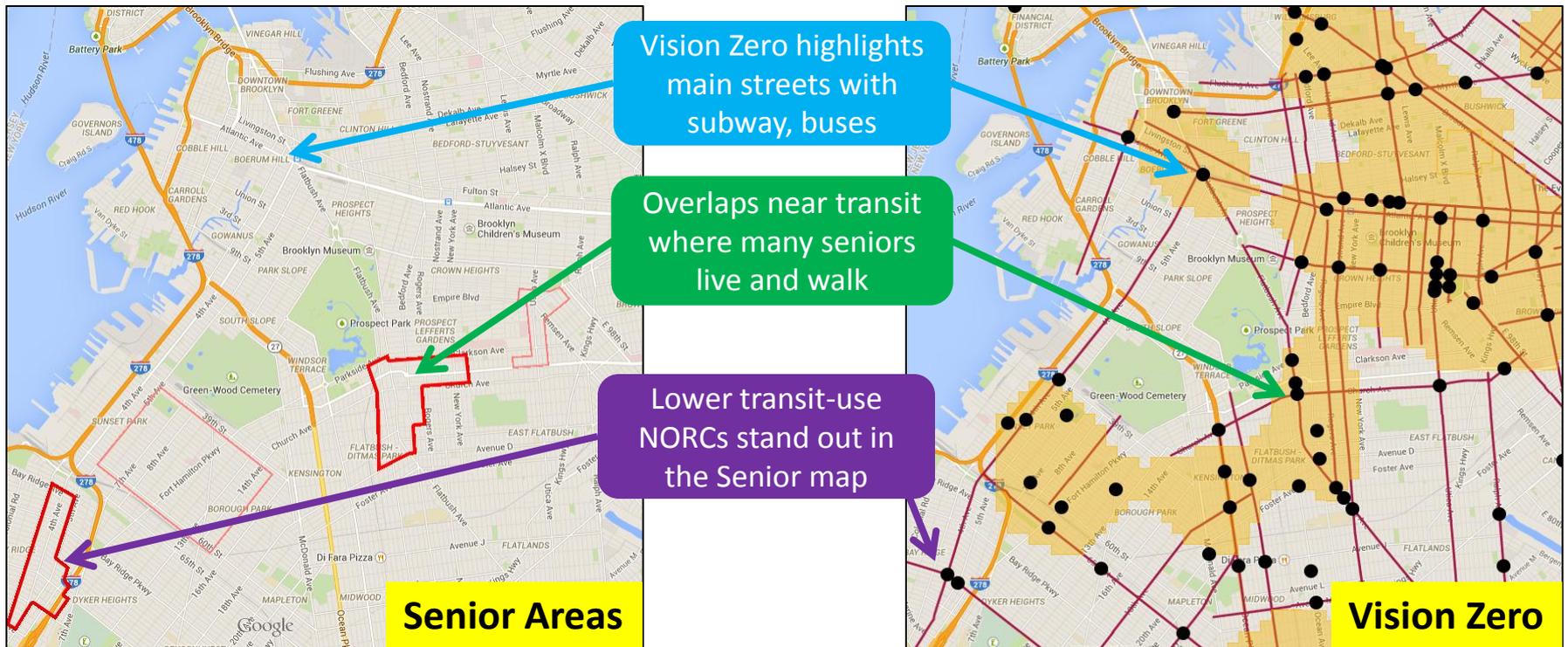


59  
INITIATIVES  
Age-Friendly NYC

# Next Steps: Vision Zero and Senior Safety

## Future of Senior program

- Age-friendly NYC initiative unites senior population growth with DOT safety goals
- Areas with senior pedestrian injuries will continue to be studied and redesigned, even if they are outside the Vision Zero priority geographies
- A new round of Senior Areas are being developed for 2015-2017
- Focus on pedestrians crashes will continue to help with first/last mile safety





More at [nyc.gov/dot](https://nyc.gov/dot)

Thank  
You