Creating Livable Communities

Complete Street Designs for Seniors

Commissioner Janette Sadik-Khan - NYCDOT

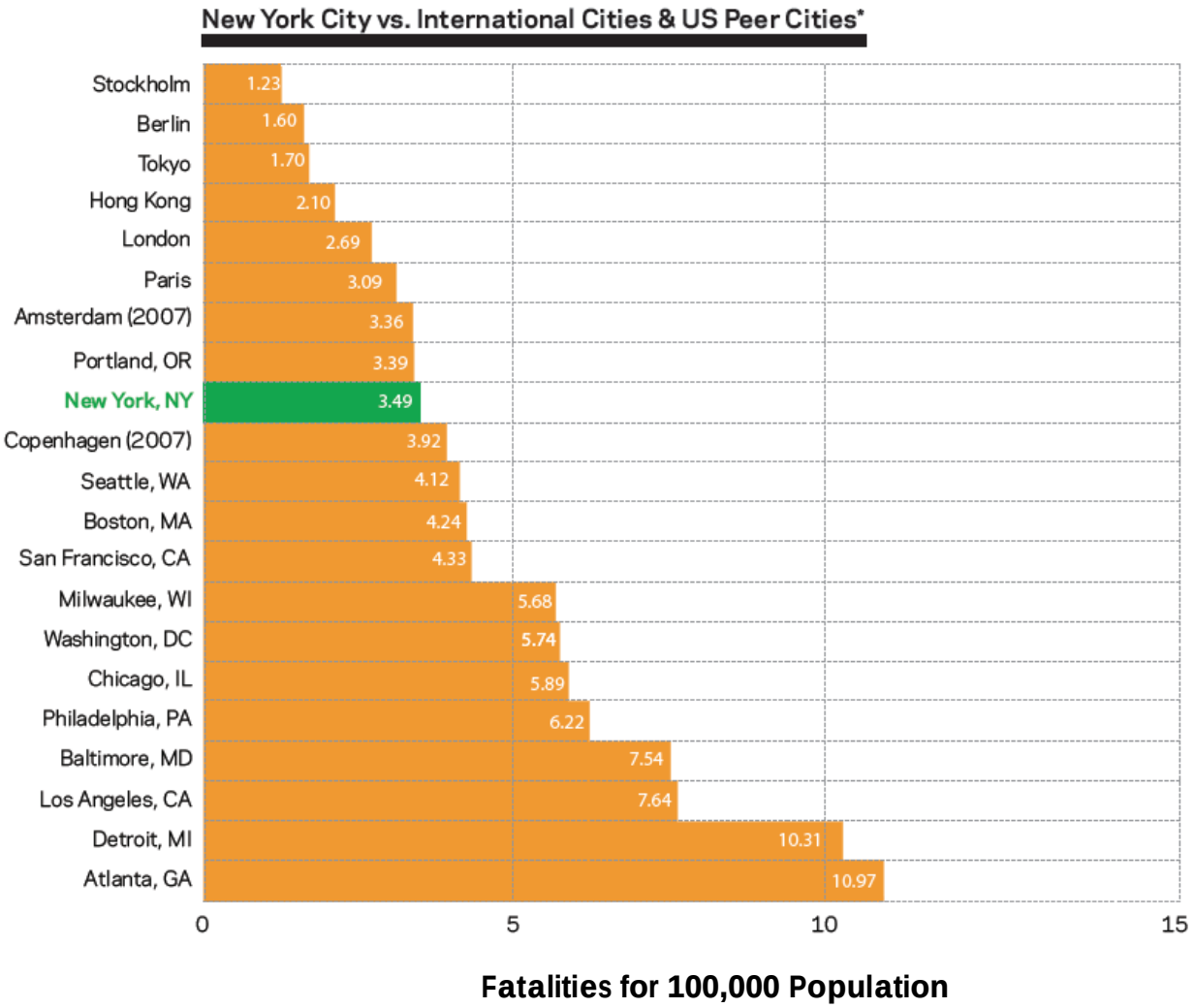
Office of Research, Implementation and Safety - April 28, 2011

NEW YORK CITY DOT

Traffic Fatalities in Perspective

NYC is the safest large US city and is growing safer

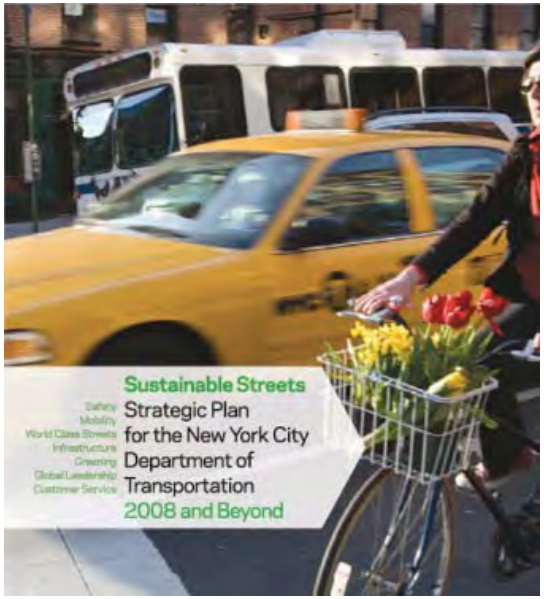
New York City's traffic fatality rate is lower than Copenhagen's and nearly equal to Amsterdam's

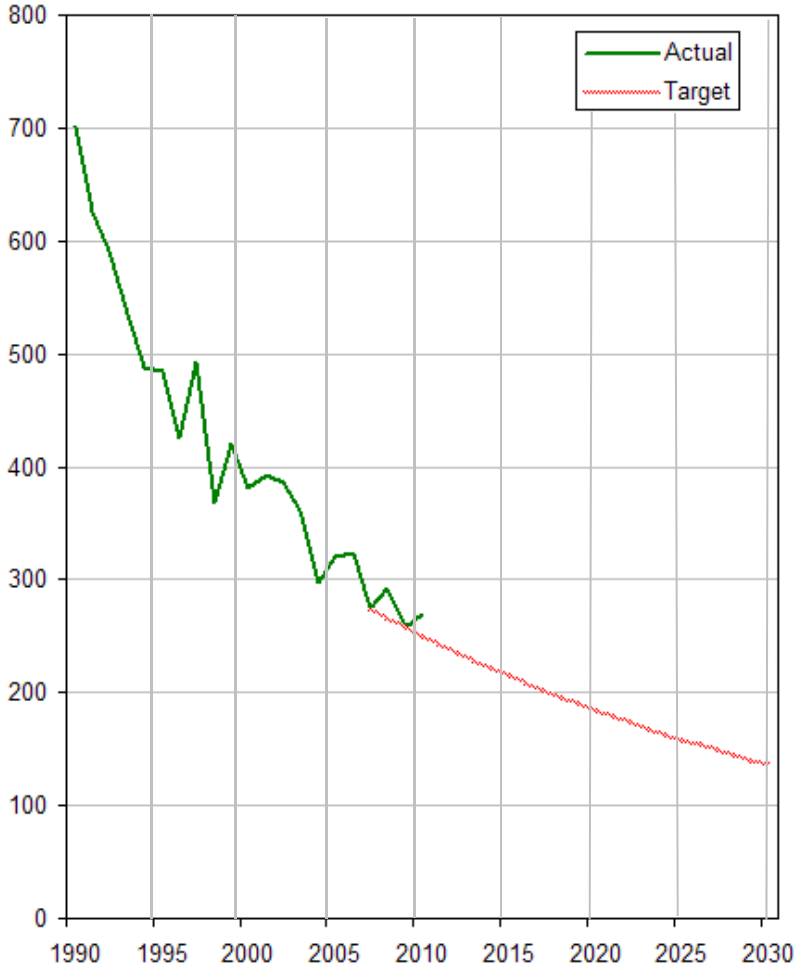


DOT Safety Goal

Strategic Plan:
Reduce Fatalities by 50%
by 2030

From 274 (2007) to 137 (2030)



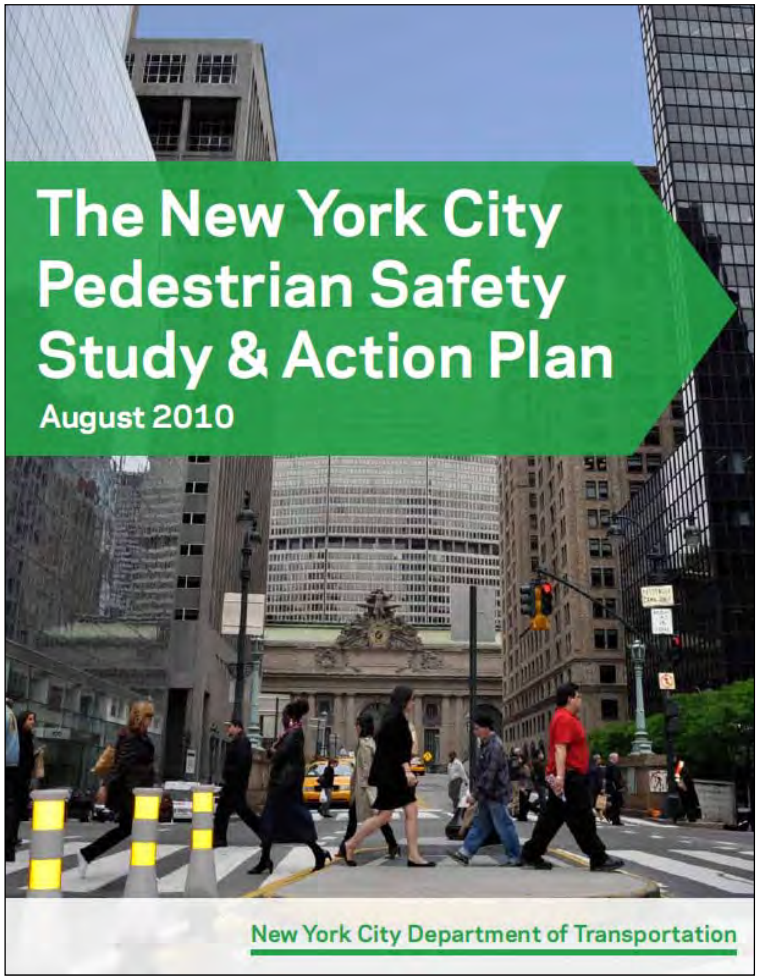


NYC Actual & Target Traffic Fatalities 1990-2030

New York City Pedestrian Safety Study and Action Plan

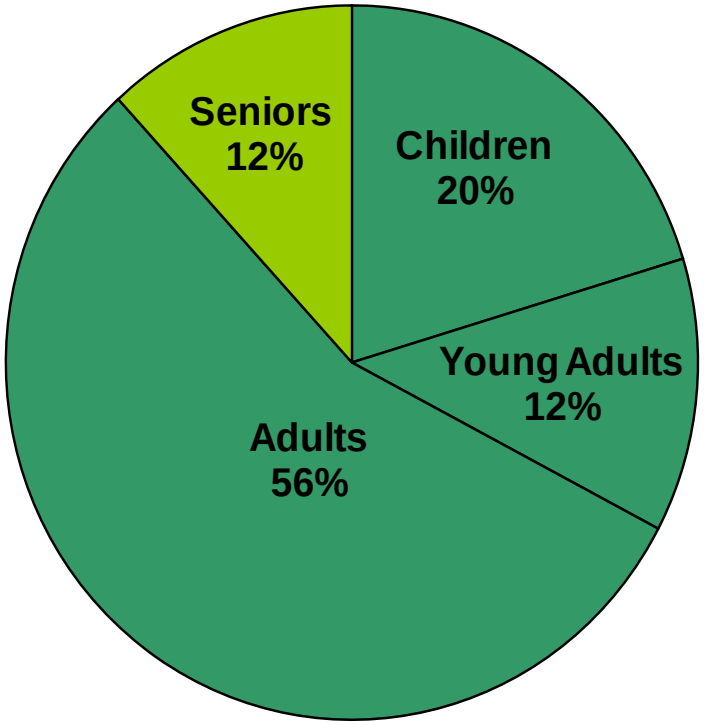
Most comprehensive pedestrian study undertaken by a major city in the U.S.

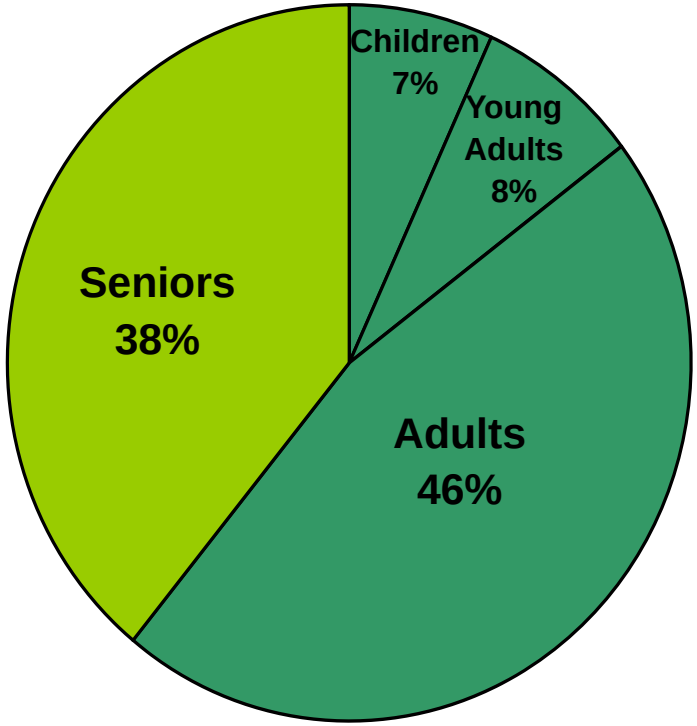
- Focus on **Vulnerable Road Users**
  (Pedestrians, Bicyclists, Motorcyclists)
  - Vulnerable Road Users:
    71% of all fatalities
    (2005-2009)
  - Pedestrians:
    52% of all fatalities
    (2005-2009)
  - Seniors:
    38% of all fatalities
    (2008)



Vulnerable Road Users:

- Seniors are **12% of NYC's population** but account for **38% of fatalities**



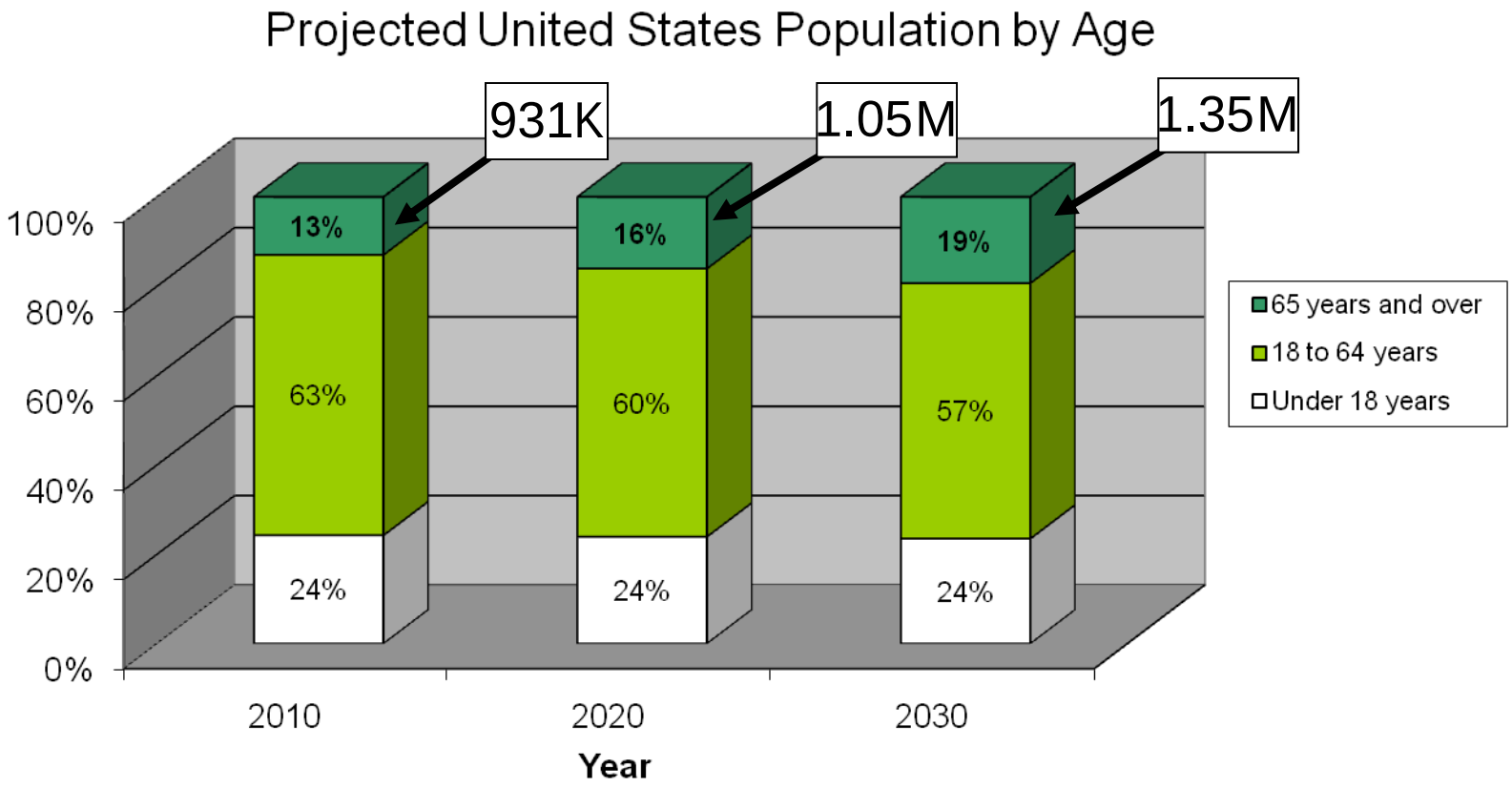


Children (0-14)	Seniors (65+)
Young Adults (15-24)	Adults (25-65)

Source: 2008 - NYCDOT-NYPD Fatality Database, Population Division, U.S. Census Bureau

Vulnerable Road Users:

- Over the next 25 years, NYC's population of adults over age 65 is expected to **increase by nearly 50%**

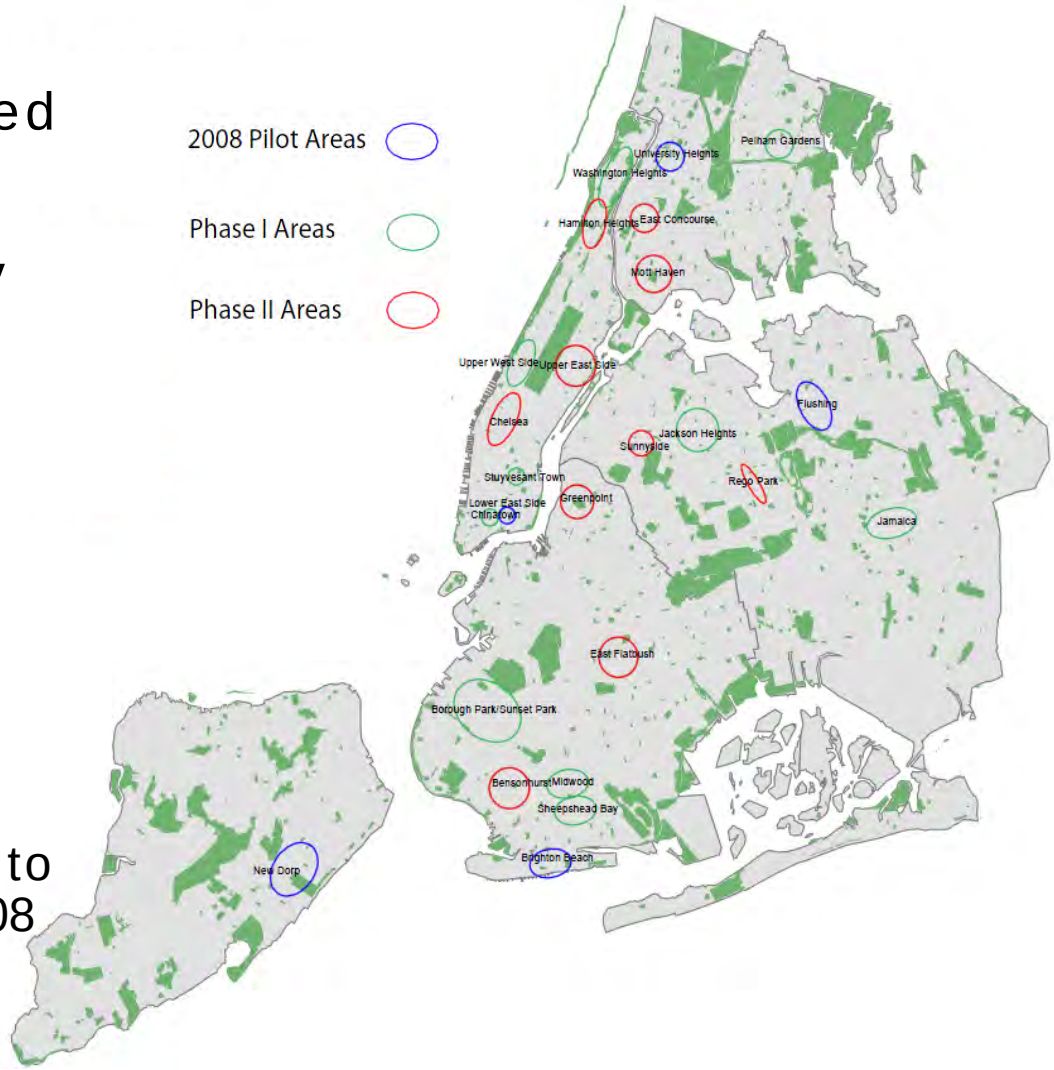


Source: Population Division, U.S. Census Bureau

Source: New York City Population Projections by Age/Sex & Borough 2000–2030 – NYC Department of City Planning

Safe Streets for Seniors

- Designate **25 Senior Pedestrian Focus Areas** based on density of senior crashes
- Study and **implement safety improvements** in areas
- **Improvements** (examples):
  - Shorten crossing distances
  - Calm traffic
  - Provide refuge islands
  - Extend crossing time
- **Findings**:
  - Senior fatalities decreased to 29% in 2010 from 38% in 2008 of all fatalities

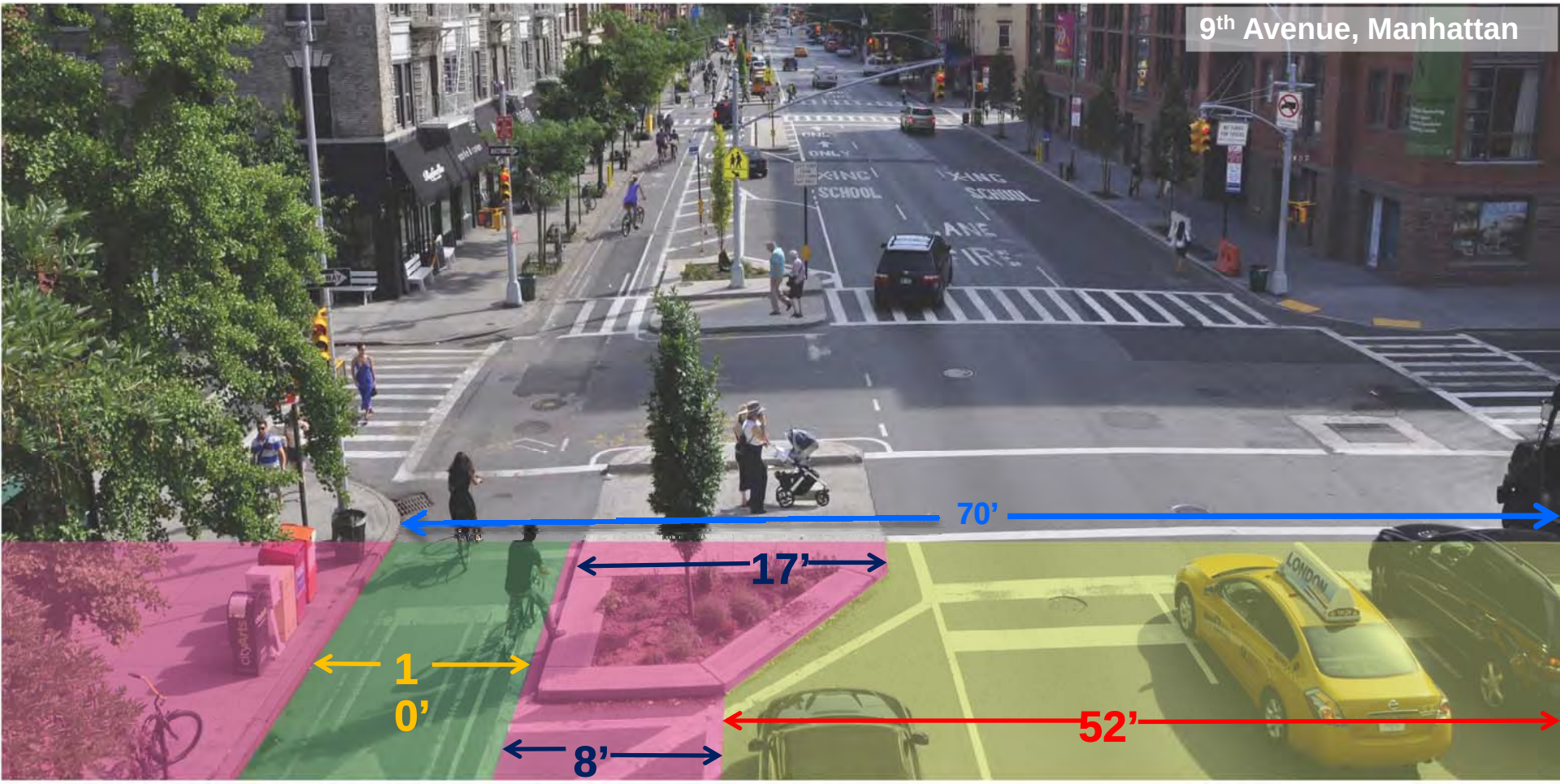


Seniors:

- Safety risks, both real and perceived, are two factors that limit pedestrian trips, especially for children and seniors

- AARP: 50% of adults over the age of 50 reported that they could not cross the main roads near their homes safely
  - Half the adults that reported these problems stated that they would walk more if these conditions were improved

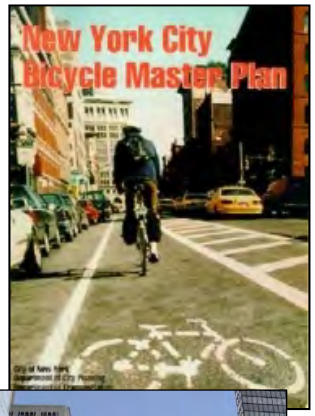
Complete Streets Design Philosophy

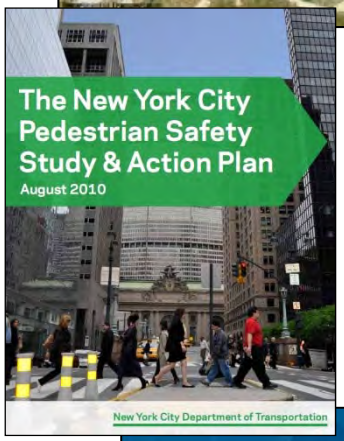


Proportion of Road:

- Cyclists 14%
- Pedestrians 11-24%
- Motor Vehicles 60-74%

Complete Streets Background





- Over 8 acres of public plaza space installed (2006-2010)
- 250 miles of bicycle routes installed (2006-2010)
- Over 100 miles of roadway traffic calmed (2008-2010)

Herald Square, Manhattan

1. Increase Public Space

- Active Living Research: Safer, pedestrian-friendly streets encourage everyday walking, an important part of a healthy lifestyle
  - People that reside in areas with more high quality sidewalks and bike lanes are more likely to be active and less likely to be overweight
- **Major two-way** streets account for 47% of pedestrian fatalities but only 12% of the roadway network

Green Light for Midtown

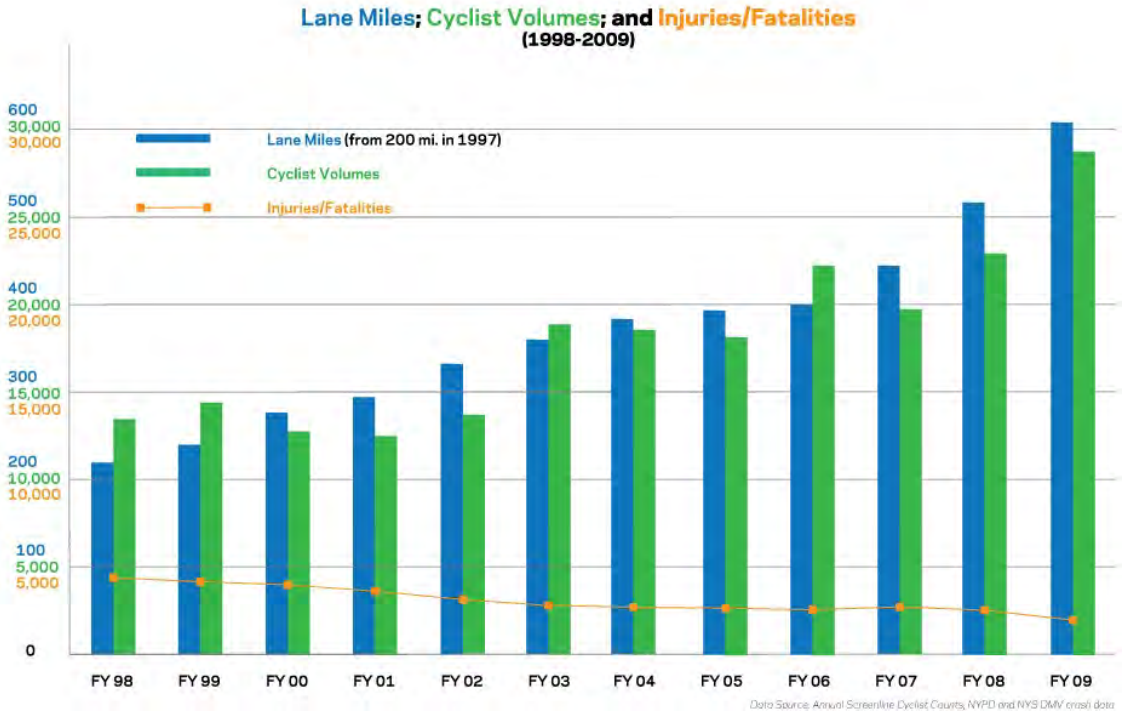
2. Install Bike Facilities

- Controlling for other factors, pedestrian KSI crashes on streets with bike lanes were ~40% less deadly as other streets
- Pedestrian killed or severely injured (KSI) crashes involving **unsafe vehicle speeds** are nearly twice as deadly as others

Bicycle Network

- Over 700 miles of bicycle facilities with 250 installed since 2006

- **Treatments**(examples):
  - Remove travel lanes
  - Provide floating parking lanes
  - Install wide parking lanes
  - Reduce width of travel lanes



On-Street Bicycle Paths: Design & Benefits

9th Avenue, Manhattan (2008)

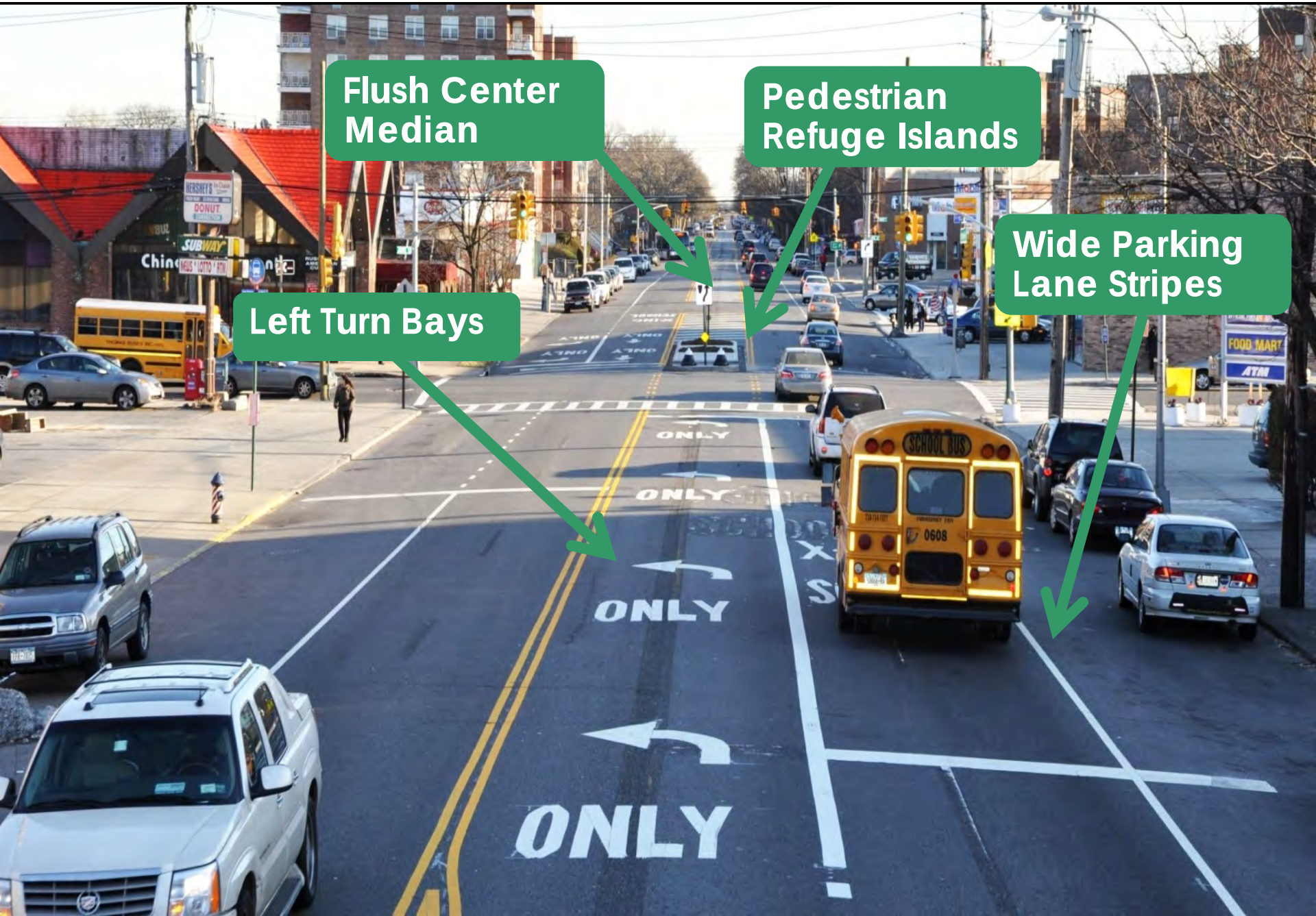
Bicycle Network

3. Traffic Calming – reducing vehicle speeds

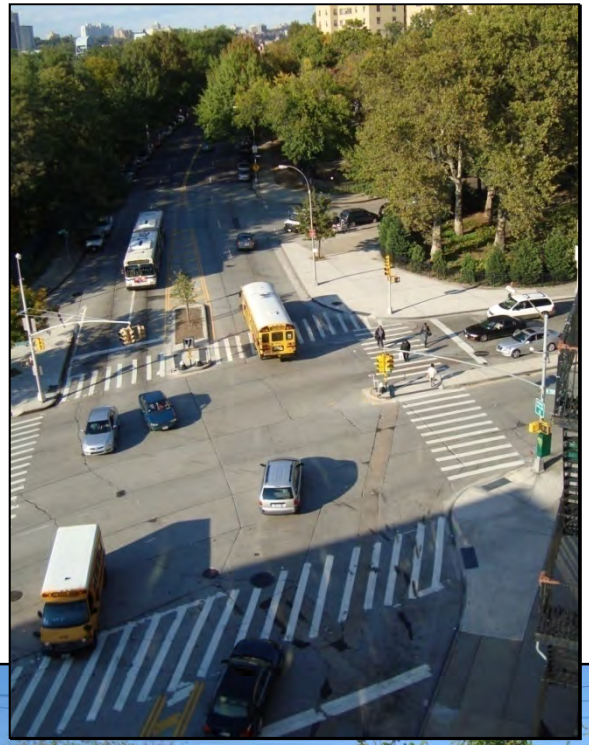
- **Arterial streets** account for ~60% of pedestrian fatalities but only 15% of the road network
- Pedestrian KSI crashes on **arterial streets** are ~2/3 more deadly than crashes on non-arterial streets

Traffic Calming: High Crash Corridors

- **Rank corridors** by borough based on number and severity of crashes
- Redesign **60 miles** of corridors each year
- **Treatments**(examples):
  - Remove travel lanes
  - Install wide parking lanes
  - Reduce width of travel lanes
  - Install center medians
- **Findings**:
  - Reduce speeding
  - Improve pedestrian safety
  - Enhance streetscape
  - Create walkable streets


Flush Center Median
Pedestrian Refuge Islands
Wide Parking Lane Stripes
Left Turn Bays
ONLY
ONLY
ONLY
ONLY
SCHOOL BUS
0608
SUBWAY
DONUT
FOOD MART
ATM

Traffic Calming: Safe Streets for Seniors



The End

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