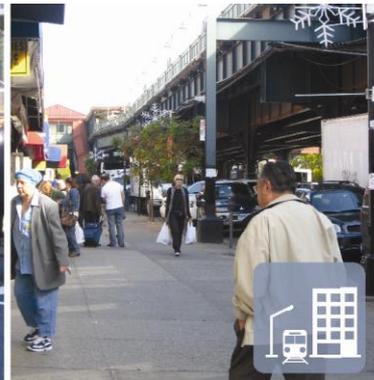




# MOBILITY INITIATIVES FOR AN AGING POPULATION

## A SCAN OF CURRENT PRACTICES





## BACKGROUND

- Introduction
- Study Goals
- Age-Friendly NYC
- Aging Population, Demographics, Trends
- Challenges to Mobility

## CASE STUDIES

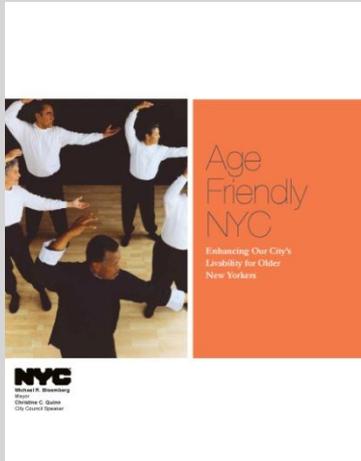
- Driving – Roadway Improvements and Licensing Policy Changes
- Public Transportation, Taxis and For-hire vehicles
- Pedestrian Improvements – Signage and Crosswalk Changes
- Planning Tools – Smart Growth and Street Design
- Innovative Technologies and Educational Programs

## NEXT STEPS



The Department of City Planning predicts that in 20 years, New York City's shares of schoolchildren and older people will be about the same, 15 percent each, a sharp change from 1950, when schoolchildren outnumbered older residents by more than 2 to 1.

- ✚ Identify current mobility issues of older adults
- ✚ Help our city better address the mobility needs of its growing senior population
- ✚ Examine innovative solutions in transportation mobility and accessibility for an aging population
- ✚ Provide demographic information, travel patterns and trends supporting the projected growth of the 65 and over population
- ✚ Seek potential mobility solutions for older adults by examining 17 current practices within the United States and throughout the world.



### AGE-FRIENDLY NYC

59 initiatives in 4 categories:

- Community and Civic Participation
- Housing
- Public Spaces and Transportation
- Health and Social Services

Initiative #34 - "Conduct a study to better address the mobility needs of older New Yorkers."



### MOBILITY INITIATIVES FOR AN AGING POPULATION

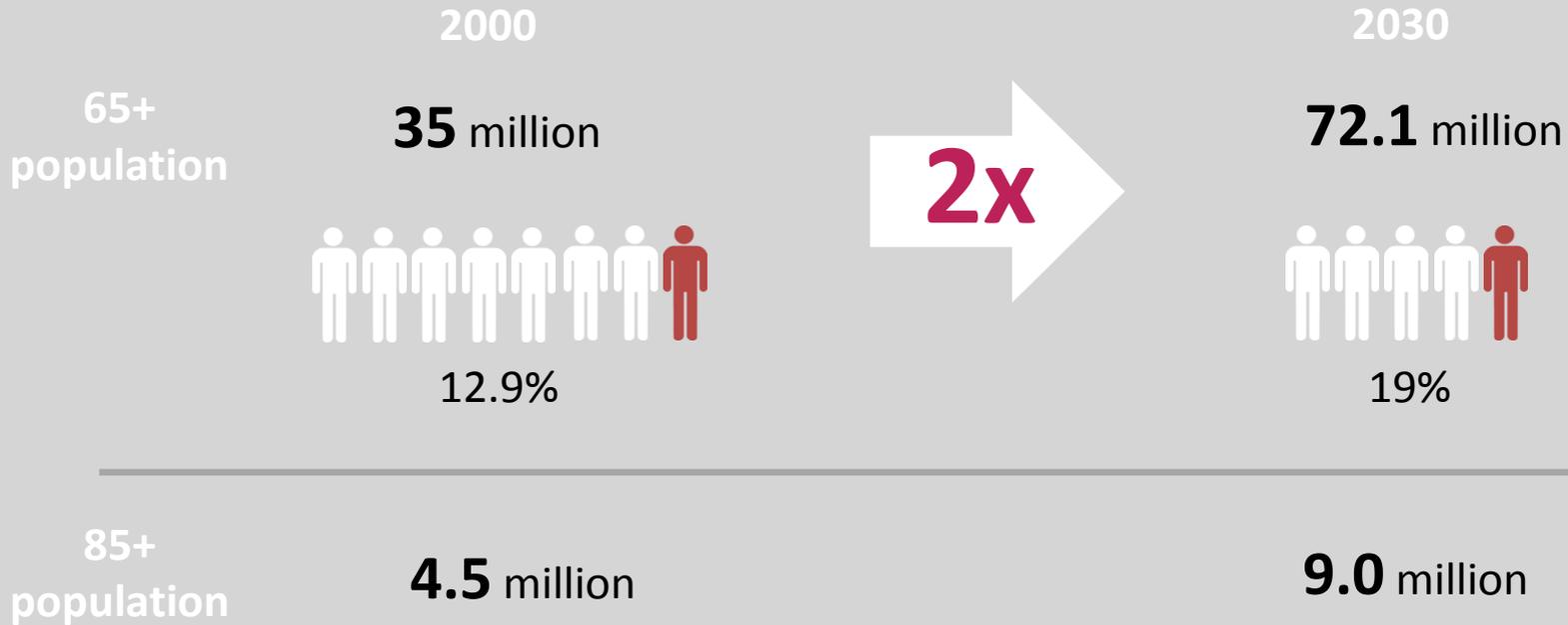
17 current practices/case studies in 5 categories:

- Driving
- Public Transportation
- Pedestrian
- Smart Growth and Street Design
- Innovation and Education

14 case studies echo initiatives outlined in *Age-Friendly NYC*.



Americans over 65 represent the fastest growing population segment in the United States.





# Aging Population Demographics and Trends: New York City



\*the following graphics illustrate data from the 2000 U.S. Census and the Department of City Planning, Population Division projections for 2030

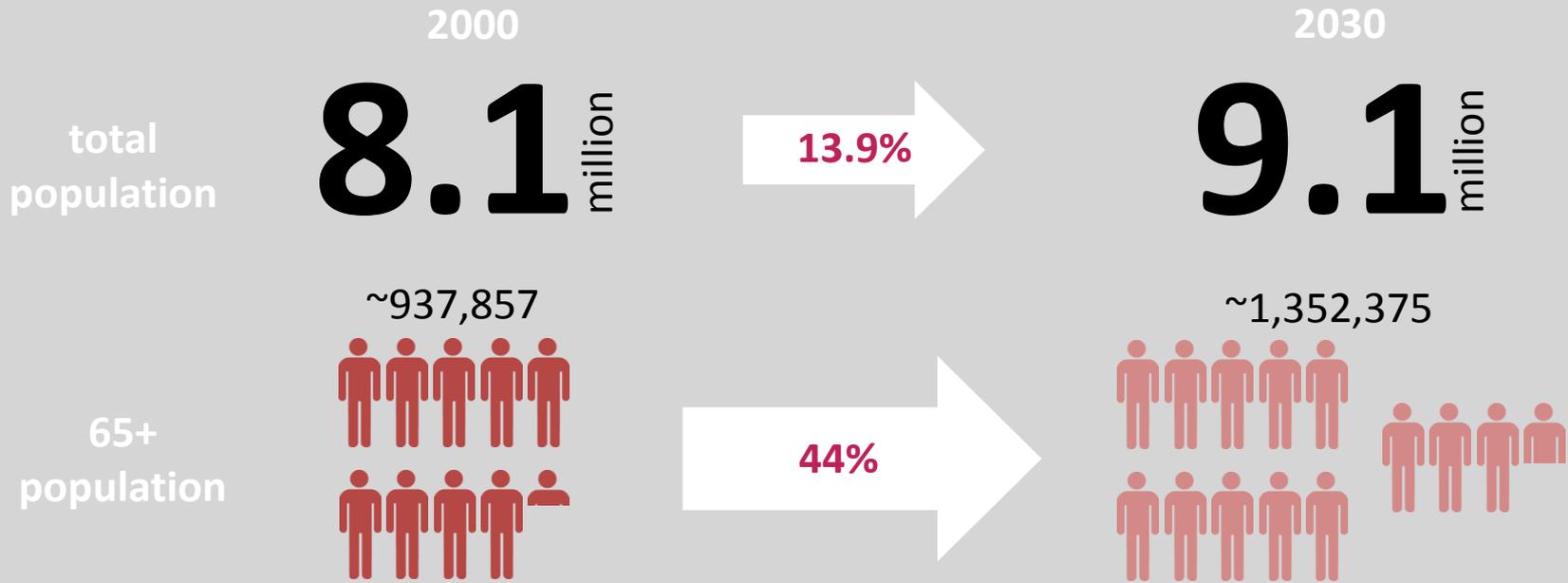


FIGURE 2: Total Population by Borough

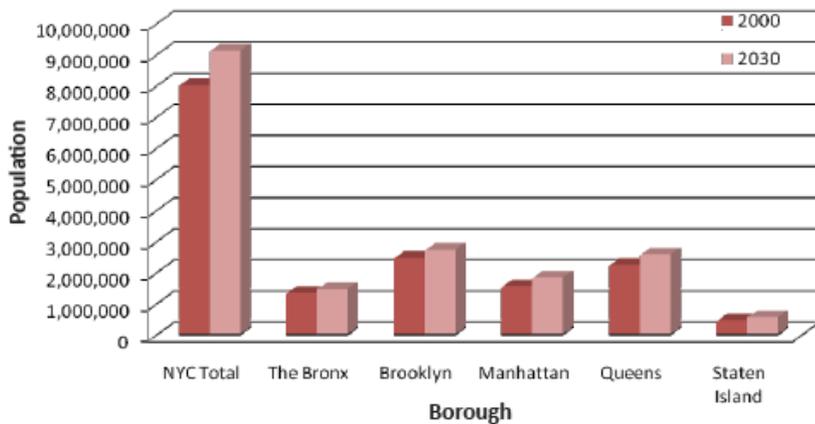
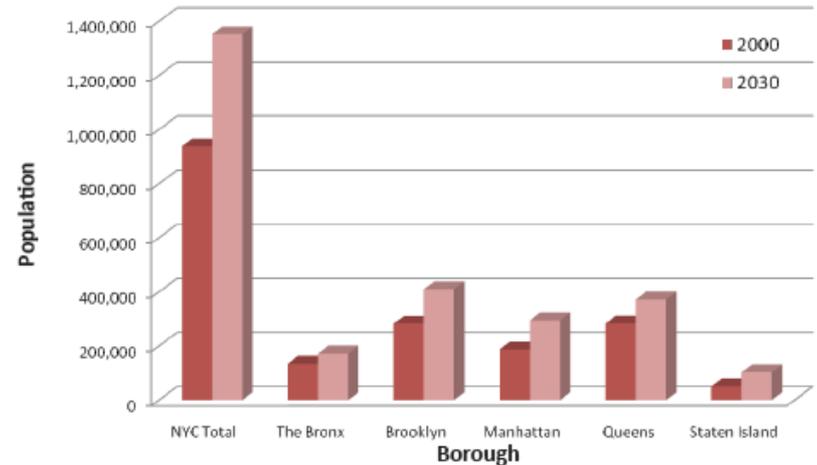


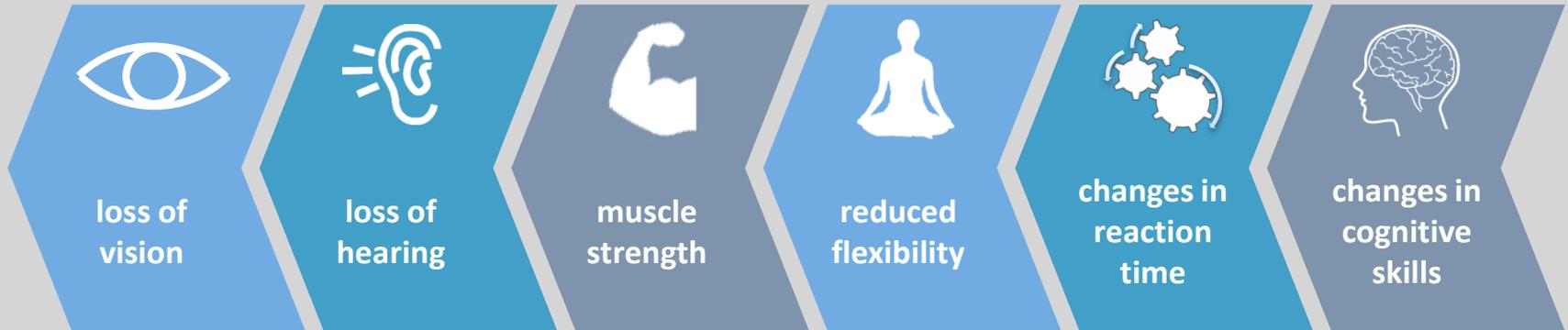
FIGURE 3: Elderly Population in Borough





## Impact of Aging on Mobility

Mobility impairments can result from many of the natural results of aging:



Planning for a future New York City that preserves the quality of life for the aging as well as ALL New Yorkers will need to take into account the above challenges, especially **loss of vision** and **changes in reaction time**, since they are two primary abilities that tend to decrease with age.



The case studies section of the report is divided into 5 categories: Driving, Public Transportation, Pedestrian, Planning Tools and Innovative Technology and Educational Programs

Within each section are current practices illustrating innovative solutions in transportation, mobility, and accessibility for an aging population that are currently in place within cities in the United States and other world cities. These practices address the challenges of our aging population.



### **DRIVING-ROADWAY IMPROVEMENTS AND LICENSING POLICY CHANGES**

Showcase Roadway Project - DETROIT, MICHIGAN  
20 MPH Zones - LONDON, ENGLAND  
Elderly Licensing and Labeling Safety Policies - TOKYO, JAPAN



### **PUBLIC TRANSPORTATION, TAXIS AND FOR-HIRE VEHICLES**

Step-Free Access - LONDON, ENGLAND  
Access at the MBTA - BOSTON, MASSACHUSETTS  
Accessible Taxis - LONDON, ENGLAND  
ITN Portland - Dignified Transportation Services for Seniors- PORTLAND, MAINE



### **PEDESTRIAN IMPROVEMENTS-SIGNAGE AND CROSSWALK CHANGES**

LED Crosswalk Signs - NAVAL STATION MAYPORT, FLORIDA  
Flashing Beacon and Ground Flashers - SAN JOSE, CALIFORNIA  
Pedestrian Actuated Crosswalk Flashers - KIRKLAND, WASHINGTON



### **PLANNING TOOLS - SMART GROWTH AND STREET DESIGN**

Smart Growth and Transit-Oriented Development - PORTLAND, OREGON  
Russellville Park Transit-Oriented Development - PORTLAND, OREGON  
Complete Streets Policy - MASSACHUSETTS  
Universal Design - NORWAY



### **INNOVATIVE TECHNOLOGIES AND EDUCATIONAL PROGRAMS**

Active Aging Program - PORTLAND, OREGON  
Car-Fit Program - UNITED STATES  
Pedestrian Navigation System - JAPAN



# DRIVING - Roadway Improvements and Licensing Policy Changes



## Showcase Roadway Project

Detroit, Michigan

Improving roadway and street signage



## 20 MPH Zones

United Kingdom

lowering vehicle speeds greatly reduce serious injuries and fatalities



## Elderly Licensing and the Vehicle Labeling Policy

Tokyo, Japan

setting new requirements for older drivers



# DRIVING - Roadway Improvements and Licensing Policy Changes



## The Showcase Roadway Project (Detroit, Michigan)

Countdown Signals

✓ Increased Font Size

✓ Clearview Font

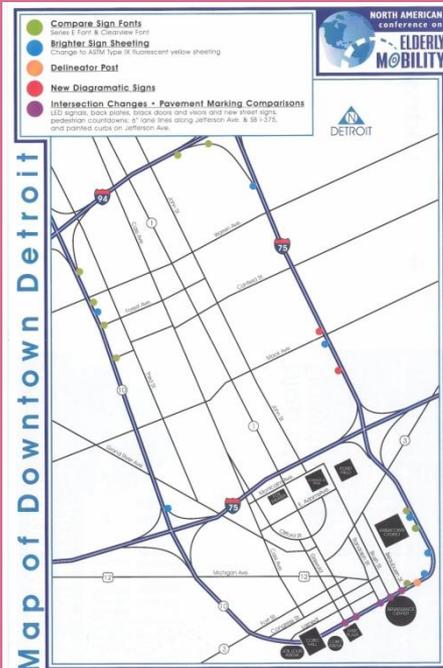
LED Lenses

✓ Retroreflectivity

Painted Curbs

## NYC APPLICATIONS and Opportunities:

Clearview Font on street signs; Signage Improvements.





# PUBLIC TRANSPORTATION, Taxis and For-Hire Vehicles



## Step-Free Access

London, England

adjustments to London's underground rail system to provide step-free access



## Access at the Massachusetts Bay Transportation Authority

Boston, Massachusetts

Impact of class action lawsuit on MBTA and transit systems across the country



## Accessible Taxis

London, England

three taxi programs that provide alternative modes of transportation with on-demand options

## The Independent Transportation Network

Portland, Maine

expands transit options by providing on-demand transportation by both paid and volunteer drivers



## Step-Free Access

London, England

- Remove all steps or barriers
- Provide step-free access from street to platform wherever possible

## NYC APPLICATIONS and Opportunities:

- Currently 72 Stations are ADA accessible; 100 Key Stations will be accessible by 2020 (25 percent of stations)
- Increase reliability of escalator and elevator service.
- PlanNYC emphasizes improving access to existing transit by 2030.





## PEDESTRIAN IMPROVEMENTS – Signage and Crosswalk Changes



### LED Crosswalk Signs

Naval Station Mayport, Florida

Improvements to sign visibility at crosswalks and intersections



### Flashing Beacons and Ground Flashers

San Jose California

observe yielding and braking at intersections in order to provide more safety at crosswalks



### Pedestrian Actuated Crosswalk Flashers

Kirkland, Washington

increasing safety by highlighting crosswalks



## PEDESTRIAN IMPROVEMENTS – Signage and Crosswalk Changes



### LED Crosswalk Signs Flashing Beacons and Ground Flashers Pedestrian Actuated Crosswalk Flashers

#### NYC APPLICATIONS and Opportunities:

- Elements of all three case studies could be combined to improve safety at crosswalks
- Flashing Beacons have been used near selected schools in NYC as a NYC DOT pilot project
- Pedestrian Actuated Crosswalks are located at 1500 intersections in NYC, but none of them incorporate embedded ground flashers





## Smart Growth and Transit-Oriented Development Portland, Oregon

implementing policies that integrate housing, transportation and sustainability



## The Russellville Park Transit-Oriented Development Portland, Oregon

transit-oriented development specifically aimed at growth designed for seniors



## Complete Streets Policy Massachusetts

promotes safely designed streets to benefit all users

## Universal Design Norway

applies the principles of Universal Design to the planning and design of spaces

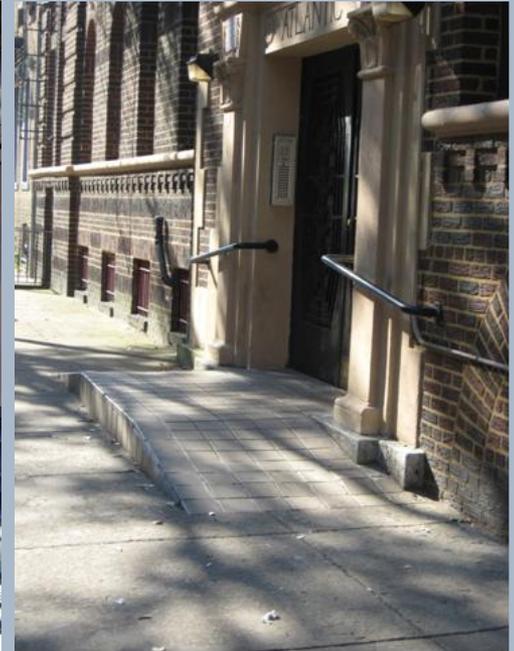


## Universal Design

- Applies the principles of Universal Design
- Planning and design of buildings, transportation facilities, public spaces, and information technologies to be usable by all people.

### NYC APPLICATIONS and Opportunities:

- Current law requires ADA access in new buildings
- Many buildings, public spaces, and transit facilities in NYC were built before ADA and are not required to provide universal access





### Active Aging Programs

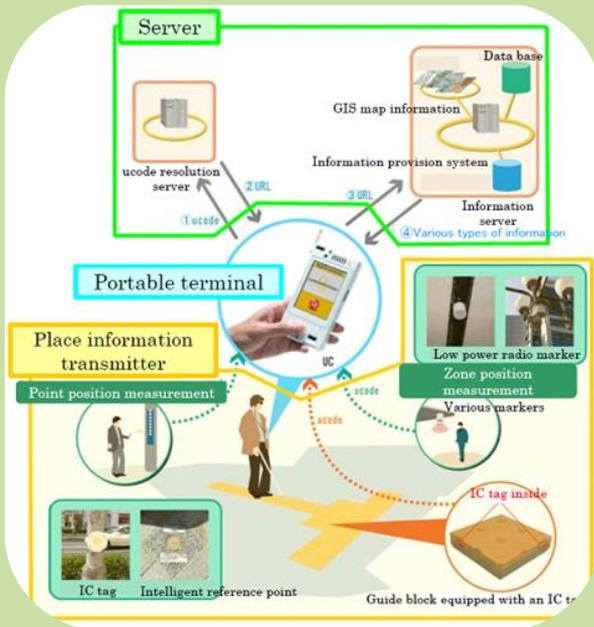
Portland, Oregon

provide programs for older adults that encourage cycling and walking to keep them mobile

### The Car-Fit Program

United States

educational program that offers older adults the opportunity to check how well their vehicles fit them to attain maximum comfort and safety



### Pedestrian Navigation System

Japan

incorporates technology to help older adults to navigate their surroundings safely whether they are driving, utilizing public transportation, or making other drivers aware of their presence



**Active Aging Programs (Portland, Oregon)**

- provide programs for older adults that encourage cycling and walking to keep them mobile.

**NYC APPLICATIONS and Opportunities:**

- The City Parks Foundation offers seniors over 60 recreation opportunities in nine parks throughout the City.
- Proposed senior exercise equipment in John Jay Park on Upper East Side.





# Status of Case Studies and Their Potential in NYC



To be Considered in the Future	Planned or Proposed	Current	Age-Friendly NYC	Relates to Issue/ Initiative	
					<b>DRIVING - ROADWAY IMPROVEMENTS AND LICENSING POLICY CHANGES</b>
		•	•	31	Showcase Roadway Project - Detroit, Michigan
		•	•	30	20 MPH Zones - London, England
•					Elderly Licensing and Labeling Safety Policies - Tokyo, Japan
					<b>PUBLIC TRANSPORTATION, TAXIS, AND FOR-HIRE VEHICLES</b>
		•	•	23	Step-Free Access - London, England
		•	•	23	Access at the MBTA - Boston, Massachusetts
	•		•	24, 25, 26, 27	Accessible Taxis - London, England
•			•	24	ITN Portland - Dignified Transportation Services - Portland, Maine
					<b>PEDESTRIAN IMPROVEMENTS - SIGNAGE AND CROSSWALK CHANGES</b>
•			•	31	LED Crosswalk Signs - Naval Station Mayport, Florida
•		•	•	31	Flashing Beacon and Ground Flashers - San Jose, California
•		•	•	31	Pedestrian Actuated Crosswalk Flashers - Kirkland, Washington
					<b>PLANNING TOOLS - SMART GROWTH AND STREET DESIGN</b>
	•		•	22, 34	Smart Growth and Transit-Oriented Development - Portland, Oregon
	•		•	34	Russellville Park Transit-Oriented Development - Portland, Oregon
		•	•	31	Complete Streets Policy - Massachusetts
		•	•	35	Universal Design - Norway
					<b>INNOVATIVE TECHNOLOGIES AND EDUCATIONAL PROGRAMS</b>
		•	•	38	Active Aging Programs - Portland, Oregon
•		•			Car-Fit Program - United States
•					Pedestrian Navigation System - Japan



## Next Steps



- ➔ Update demographic analysis using the 2010 census
- ➔ Analyze possible application/implementation of case studies in neighborhoods with high concentrations of older residents
- ➔ Investigate additional current mobility practices that could be applicable to NYC
- ➔ Create a compendium of information on aging and mobility to serve as a reference for all relevant agencies
- ➔ Continue nurturing an age-integrated society by supporting, enhancing, and implementing mobility improvements for the increasing population of older New Yorkers.