

ACTIVE

DESIGN

GUIDELINES

PROMOTING PHYSICAL ACTIVITY

AND HEALTH IN DESIGN

Skye Duncan
Associate Urban Designer
NYC Department of City Planning

June 28th 2011

Creation of the Guidelines: Interagency & Interdisciplinary



Michael R. Bloomberg
MAYOR

David Burney
COMMISSIONER
Department of Design and Construction

Thomas Farley
COMMISSIONER
Department of Health and Mental Hygiene

Janette Sadik-Khan
COMMISSIONER
Department of Transportation

Amanda Burden
COMMISSIONER
Department of City Planning

© 2010, City of New York
All rights reserved.

ACTIVE DESIGN GUIDELINES TEAM

Department of Design and Construction
David Burney, FAIA
Commissioner

Margot Woolley, AIA
Assistant Commissioner, Architecture and
Engineering Division

Victoria Milne, MID
Director, Office of Creative Services

Department of Health and Mental Hygiene
Lynn D. Silver, MD, MPH
Assistant Commissioner, Bureau of Chronic
Disease Prevention and Control

Karen K. Lee, MD, MHS, FRCP
Deputy Director, Bureau of Chronic Disease
Prevention and Control

Sarah Wolf, MPH, RD
Built Environment Coordinator, Bureau
of Chronic Disease Prevention and Control

Department of Transportation
Wendy Feuer, MA
Assistant Commissioner of Urban Design and
Art, Division of Planning and Sustainability

Hanna Gustafsson
Former Urban Fellow, Division of Planning
and Sustainability

Department of City Planning
Alexandros Washburn, AIA
Chief Urban Designer

Skye Duncan, MSAUD, BArch
Associate Urban Designer

Mayor's Office of Management and Budget
Joyce Lee, AIA, LEED AP
Chief Architect

Academic Partners

Craig Zimring, PhD
Professor,
Georgia Institute of Technology,
College of Architecture

Gayle Nicoll, MArch, PhD, OAA
Associate Professor and Chair,
University of Texas San Antonio,
Department of Architecture

Julie Brand Zook, MArch
Researcher,
Georgia Institute of Technology,
College of Architecture

Reid Ewing, PhD
Professor,
University of Utah, Department of City
and Metropolitan Planning

**American Institute of
Architects New York Chapter**
Fredric Bell, FAIA
Executive Director

Sherida Paulsen, FAIA
2009 President

Editor

Irene Cheng, MArch, MPhil
Cheng+Snyder

Community, Academic, and Private Sector

Ernest Hutton, Hutton Associates, Inc.

Ellen Martin, JTD Architects

Linda Pollak, Morpitero Pollak Architects

John Pucher, Bloustein School of Planning
and Public Policy, Rutgers University

Jessica Spiegel, JTD Architects

William Stein, Ottner Architects

Shin-Pei Tsay, Transportation Alternatives

Thanks to all the design practitioners
and organizations who participated in
the 2009 Design Workshop to help us test
the Guidelines.

THANKS TO THE FOLLOWING FOR FUNDING AND SUPPORT:

Robert Wood Johnson Foundation Active
Living Research Program—Evaluation of
the Active Design Guidelines

Milbank Memorial Fund—2009 Design
Workshop

**ACTIVE
DESIGN**

Creation of the Guidelines

Testing the guidelines through an interactive and interdisciplinary Design Charrette

Participants:
Agencies/ Developers/
AIA/ APA/ ASLA/
Engineers



1. Overview of the Urban Design and Building Chapters of the Guidelines

2. Complementary City Policy

Active Design Guidelines

1) Environmental Design and Health:
Past and Present

2) Urban Design: Creating an Active City

3) Building Design: Creating Opportunities
for Daily Physical Activity

4) Synergies with Sustainable and
Universal Design

**ACTIVE
DESIGN
GUIDELINES**

PROMOTING PHYSICAL ACTIVITY

AND HEALTH IN DESIGN

Active Design Guidelines

**1) Environmental Design and Health:
Past and Present**

2) Urban Design: Creating an Active City

**3) Building Design: Creating Opportunities
for Daily Physical Activity**

**4) Synergies with Sustainable and
Universal Design**

**ACTIVE
DESIGN
GUIDELINES**

PROMOTING PHYSICAL ACTIVITY
AND HEALTH IN DESIGN

Urban Design Strategies

- **Land Use Mix**
- **Parks / Play Areas / Plazas**
- **Pedestrian Environment**
- **Bicycle Network and Infrastructure**
- **Transit Access**

Land Use Mix

Encourage a **rich mix of land uses**



DCP Land Use Map

Create adjacency of offices and residences to services & amenities to **promote walking**



Stone Street, NYC

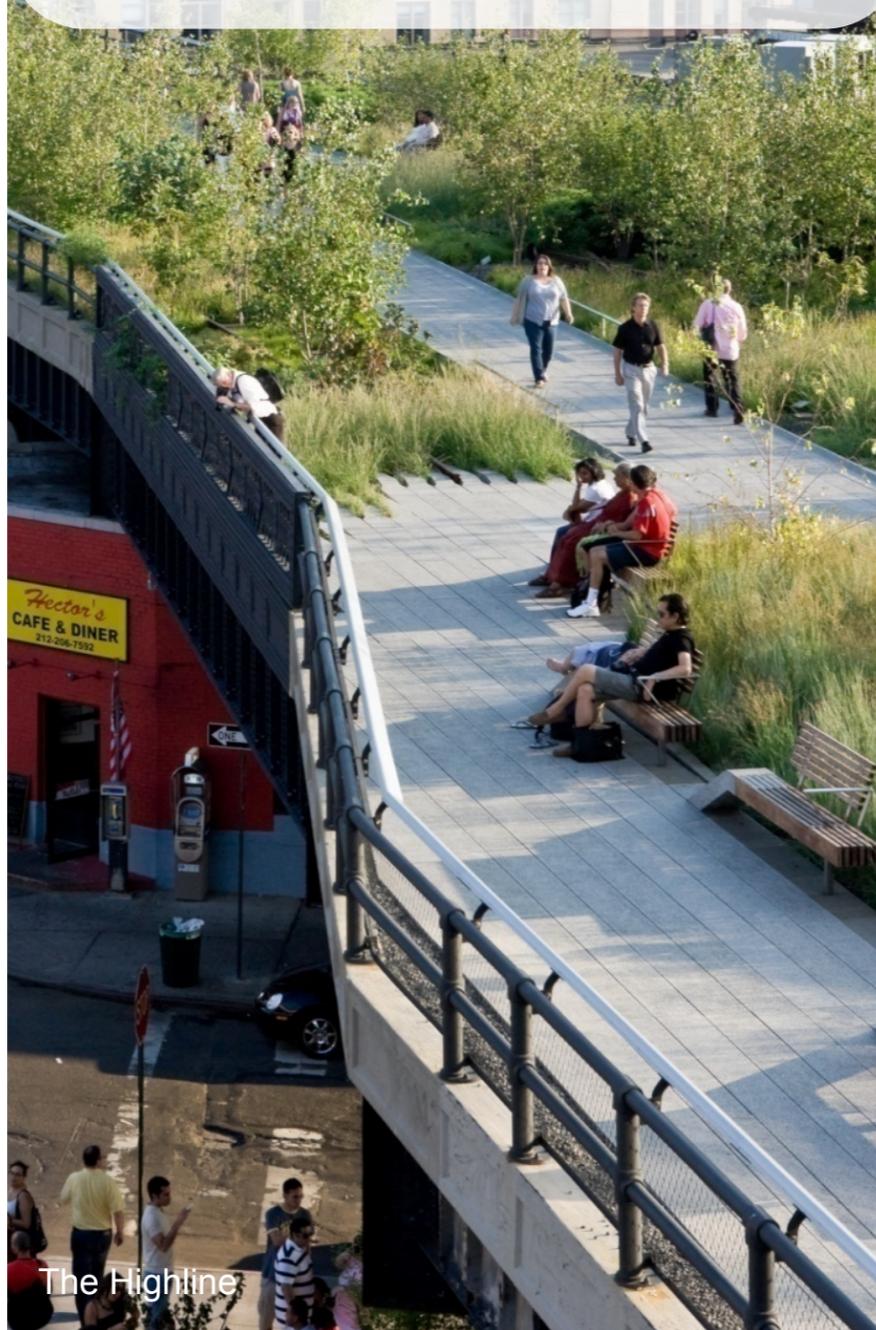
Supermarkets and farmers markets encourage **healthy nutrition**



Farmers Market, NYC

Parks/ Play Areas/ Plazas

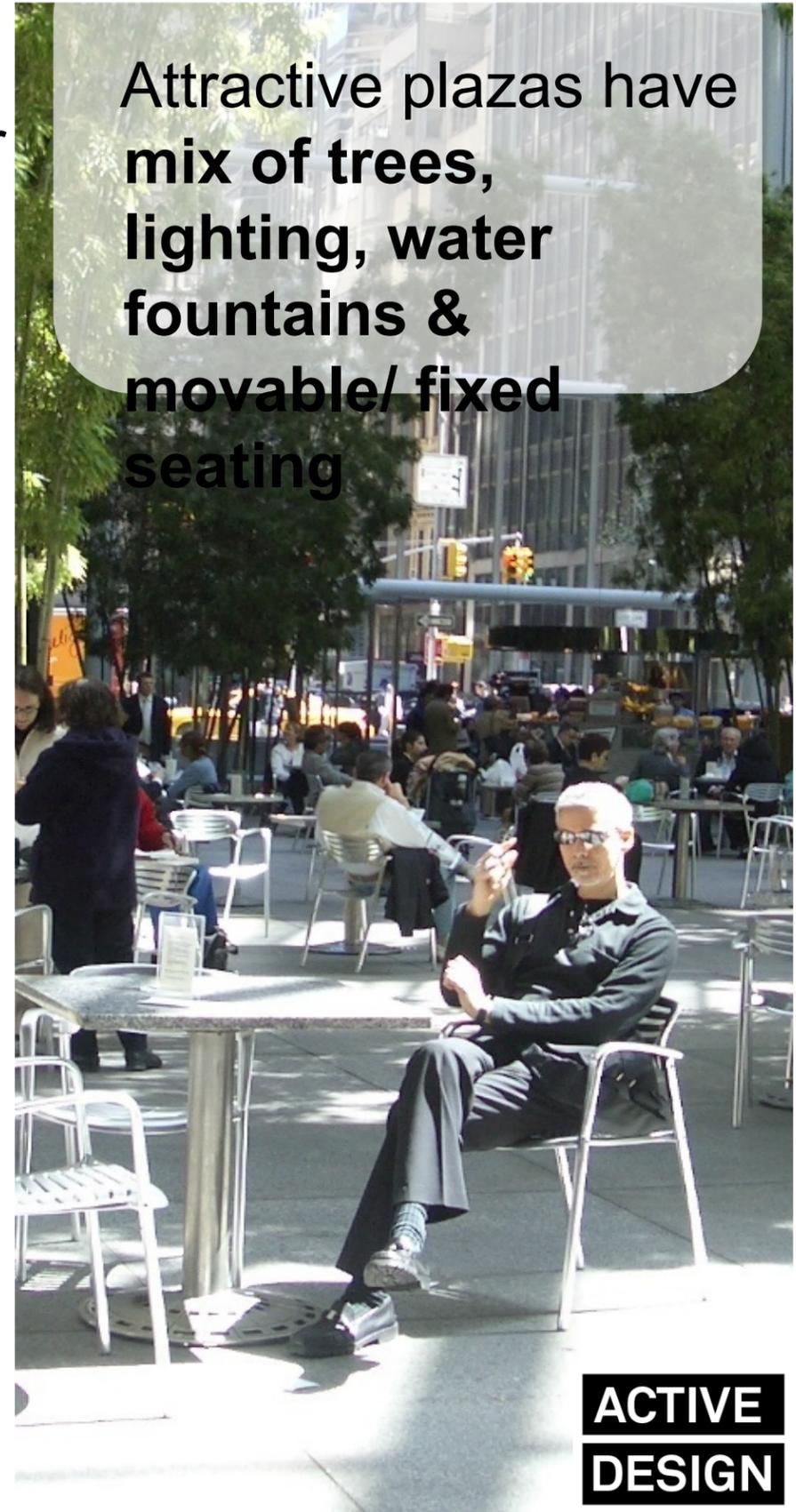
Convenient parks and plazas encourage **active use and recreation**



Design parks for **local cultures** and for **range of age groups**

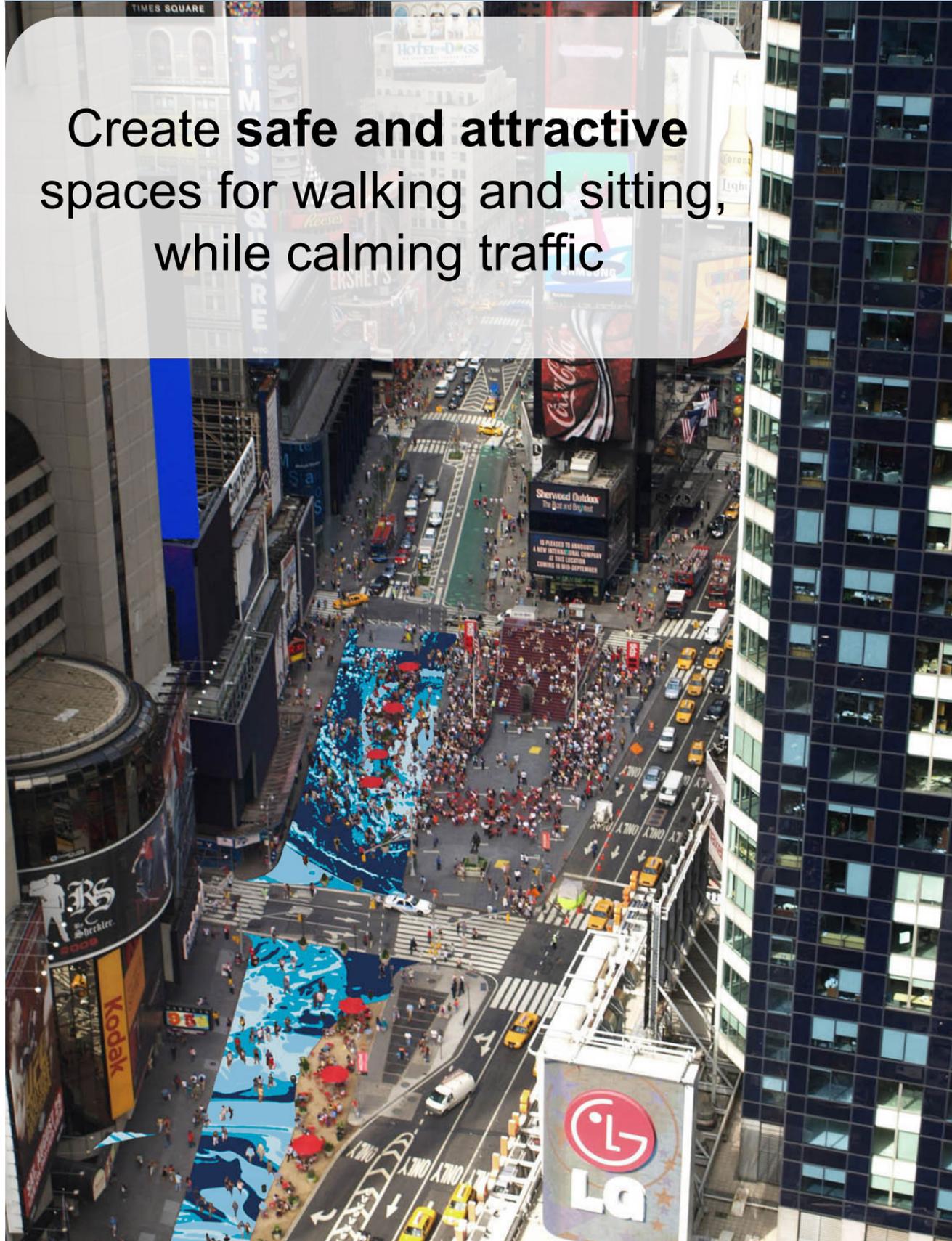


Attractive plazas have **mix of trees, lighting, water fountains & movable/ fixed seating**



Pedestrian Environment / Traffic Calming

Create **safe and attractive** spaces for walking and sitting, while calming traffic



Reduce crossing distances with **median refuge islands**



**ACTIVE
DESIGN**

Pedestrian Environment / Streetscape

Provide places of rest to complement **active walking and jogging**



The Highline

Enliven the sidewalk with **street cafes**



Integrate **public art** into the streetscape



**ACTIVE
DESIGN**

Pedestrian Environment / Streetscape

Separate traffic from seating and pedestrian areas



The Highline

Use landscaping to provide shade and an attractive environment



**ACTIVE
DESIGN**

Bicycle Network and Infrastructure

Encourage use through development of **interconnected bikeways**



Provide attractive **signage, wayfinding, and secure bike parking**



Transit Access

Provide **attractive and sheltered seating areas** to encourage use of transit routes



Separate **bus lanes from traffic** to make transit more convenient



- +selectbusservice
- M15
- Northbound
- via 1 Av to E 126 St
- E 126 St
- E 125 St
- E 116 St
- E 106 St
- E 96 St
- E 86 St
- E 79 St
- E 67 St
- E 57 St
- E 50 St
- E 42 St
- E 34 St
- E 29 St
- E 23 St
- E 14 St
- E 2 St
- Grand St
- Catherine St
- Fulton St
- Wall St
- South Ferry

ACTIVE DESIGN

Active Design Guidelines

**1) Environmental Design and Health:
Past and Present**

2) Urban Design: Creating an Active City

**3) Building Design: Creating Opportunities
for Daily Physical Activity**

**4) Synergies with Sustainable and
Universal Design**

ACTIVE DESIGN GUIDELINES

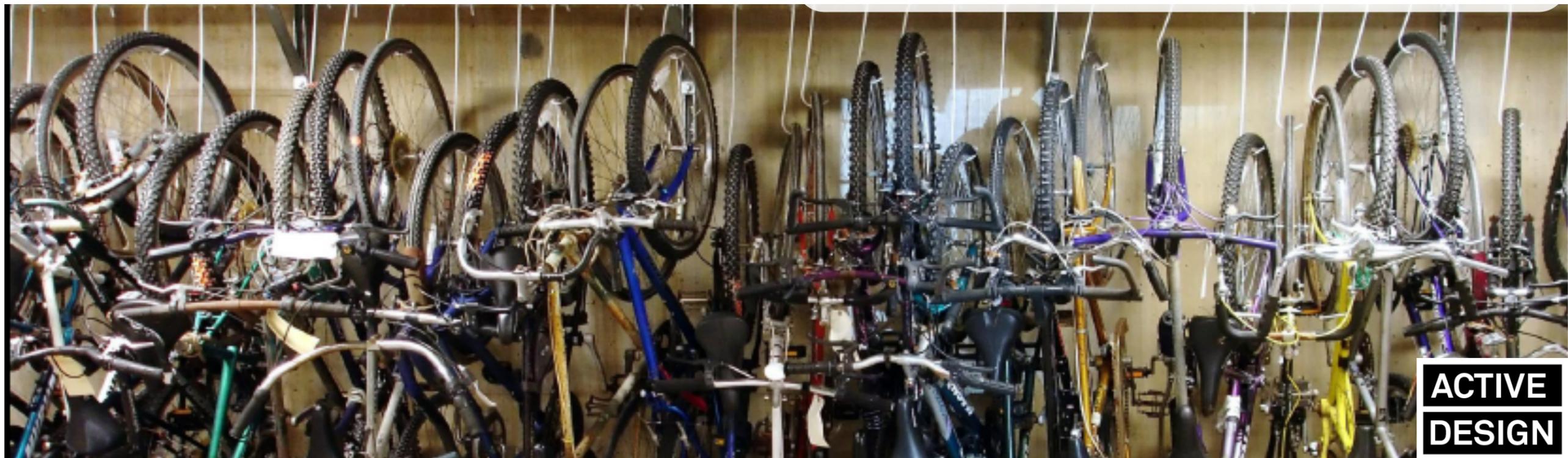
**PROMOTING PHYSICAL ACTIVITY
AND HEALTH IN DESIGN**

Building Design Strategies

- **Bicycle Parking and Storage**
- **Recreational Programming**
- **Stairs: Accessibility, Visibility, Convenience**
- **Stairs: Aesthetics**
- **Stairs: Signage and Prompts**
- **Building Exteriors: Contributing to the pedestrian realm**

Site + Building Design

Bicycle parking + storage



Site + Building Design

Recreational programming



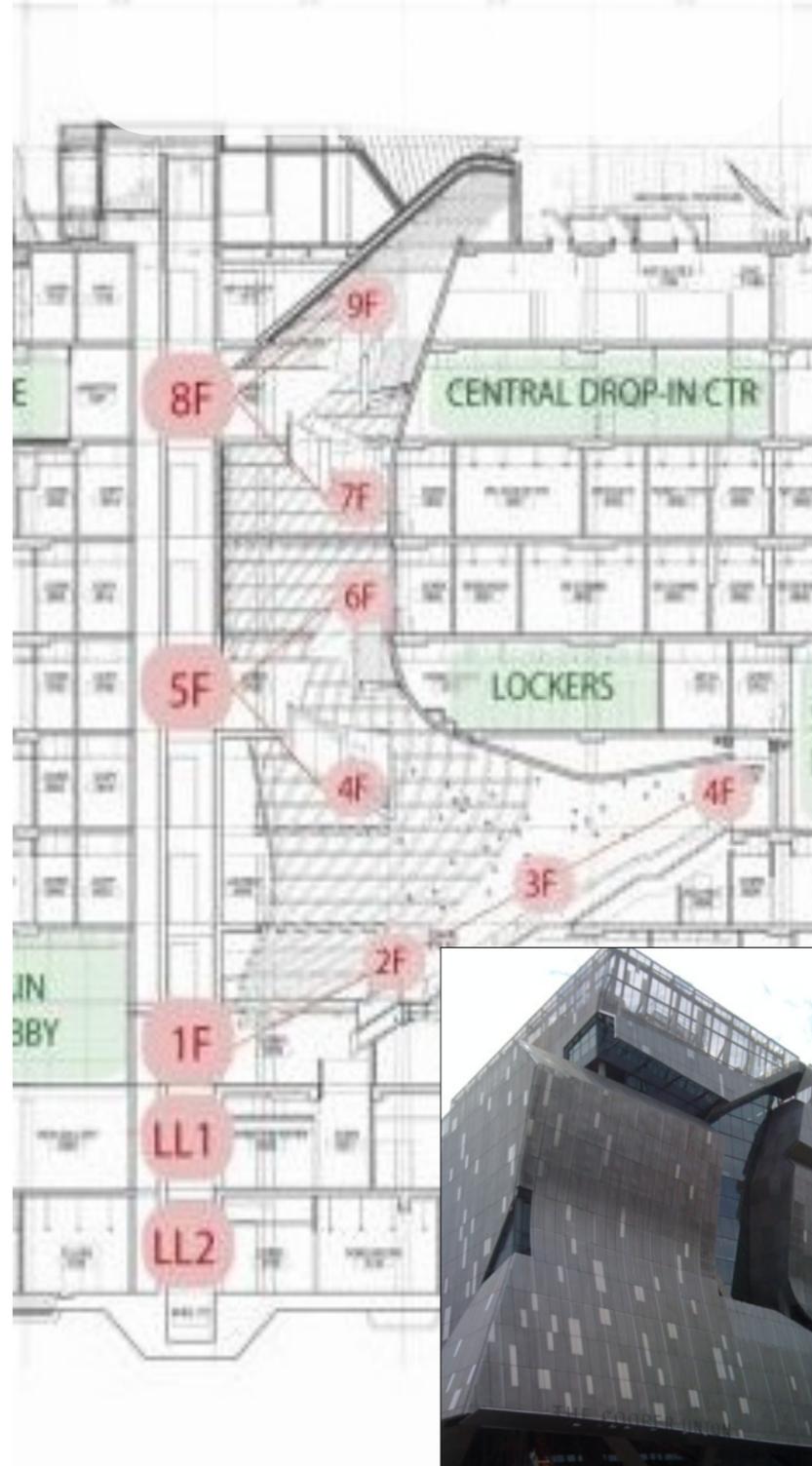
- Provides **fun and affordable** recreational opportunities
- Mary Walton Children's Center
 - Public School 64, Queens
 - 10 West End Ave, Manhattan

Stairs: accessibility, visibility, convenience

Stair of **Prominence** and **Visual Interest**



Skip Stop Elevators to increase stair use



Enclosed stairs that use **Fire Rated Glass** to **Increase Visibility**

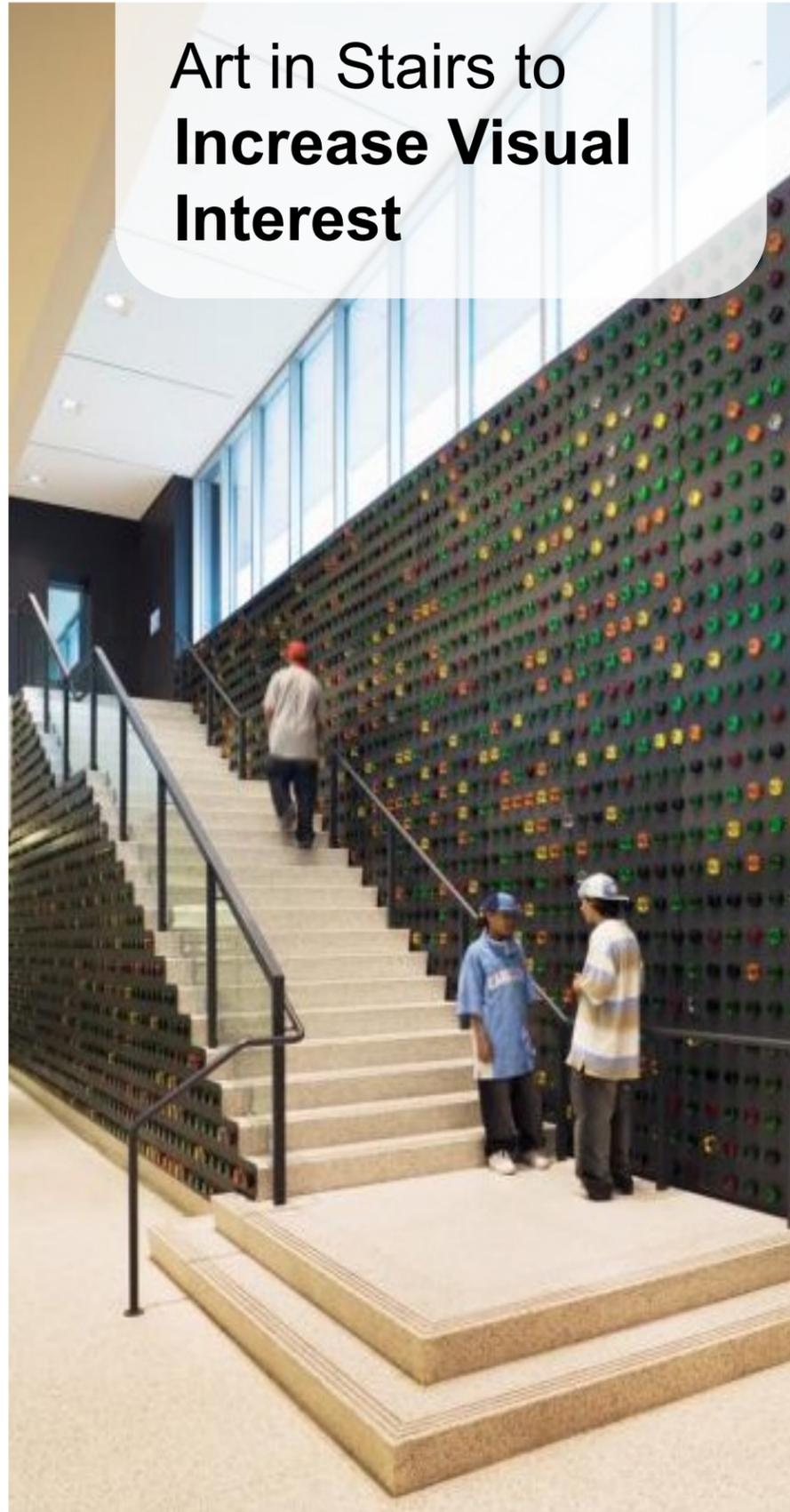


Stairs: aesthetics

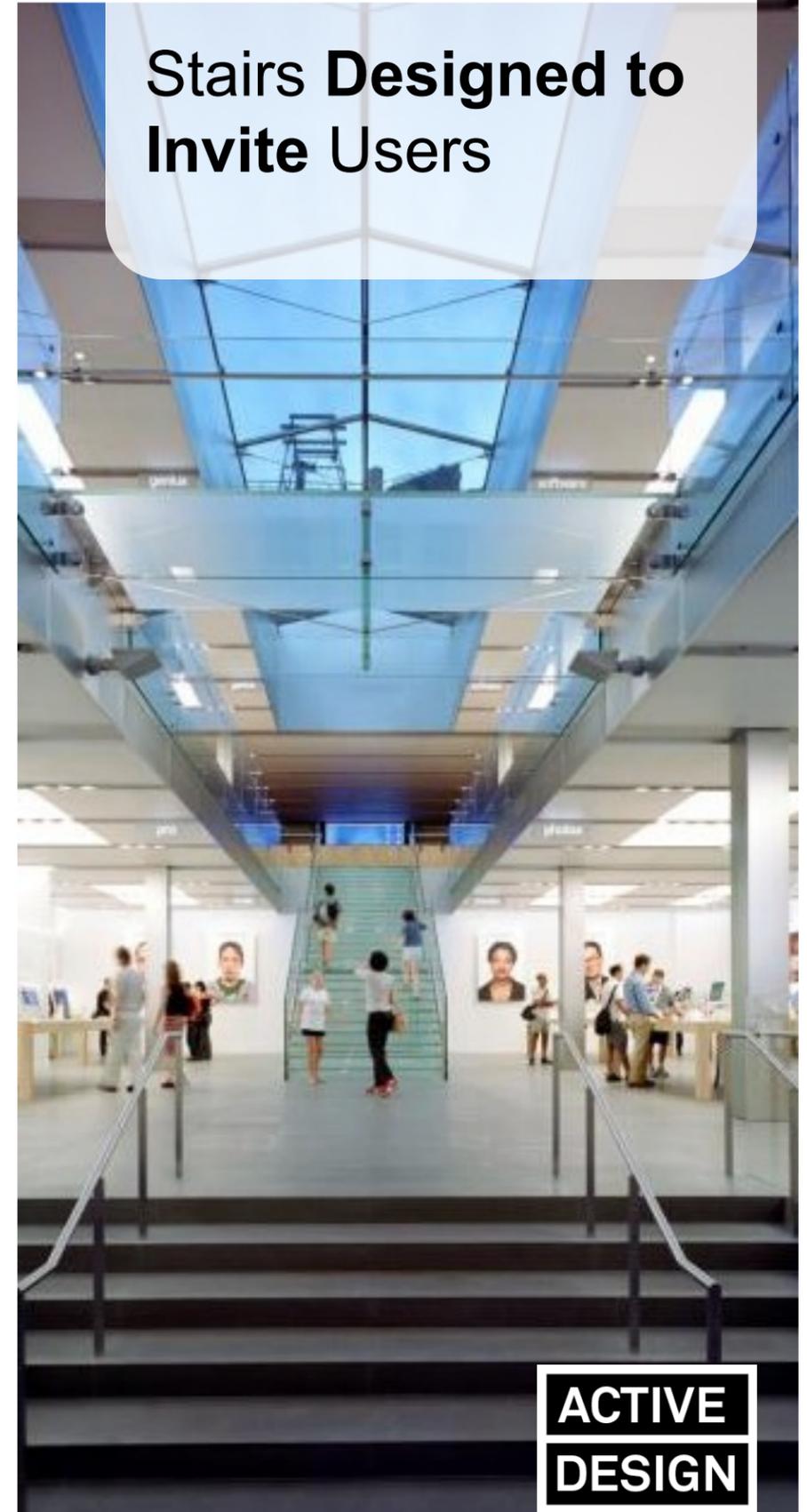
Stairs to Receive Plenty of **Natural Daylight**



Art in Stairs to **Increase Visual Interest**



Stairs **Designed to Invite Users**



**ACTIVE
DESIGN**

Stairs: signage and prompts

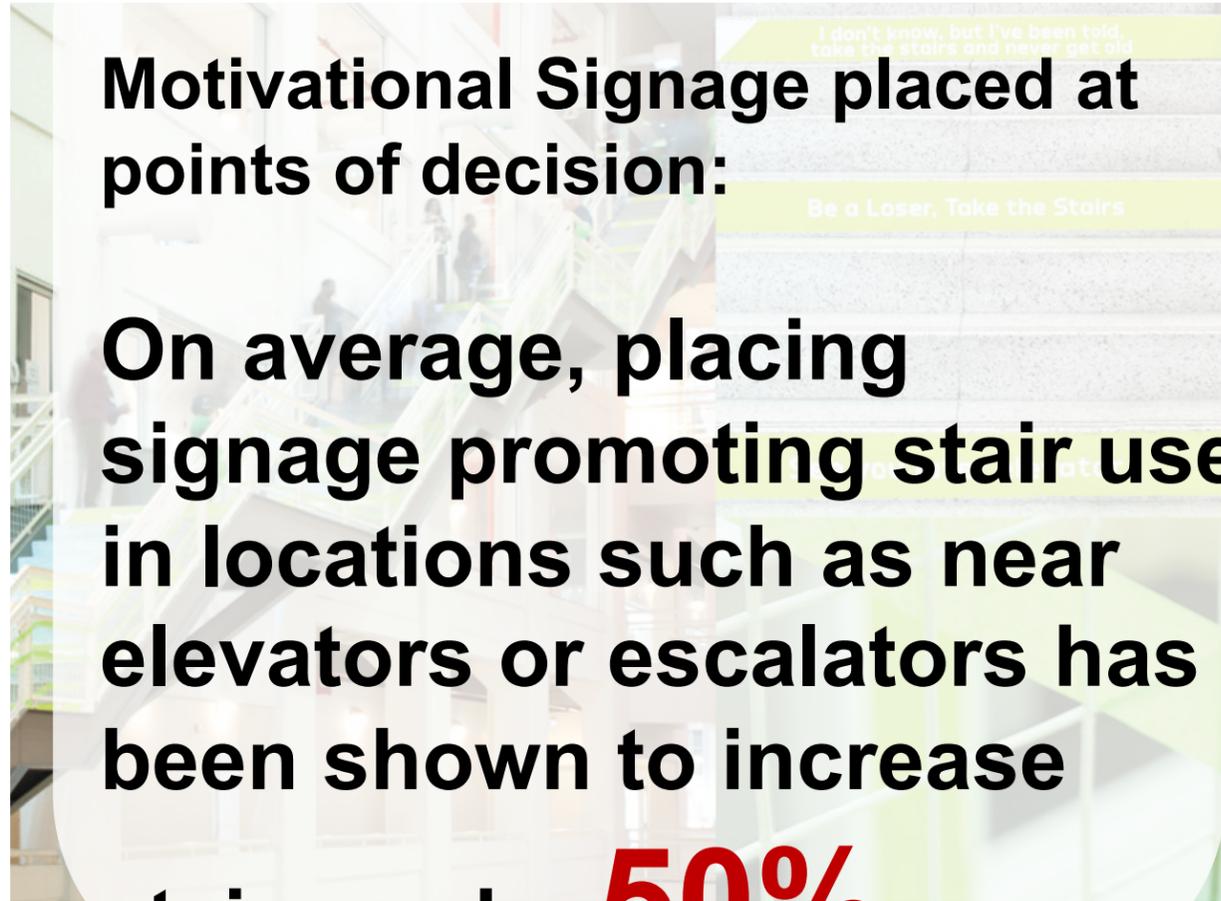
Motivational Signage placed at points of decision:

On average, placing signage promoting stair use in locations such as near elevators or escalators has been shown to increase

stair use by **50%**

I don't know, but I've been told, take the stairs and never get old

Be a Loser, Take the Stairs



Burn Calories, Not Electricity



Take the Stairs!

Walking up the stairs just 2 minutes a day helps prevent weight gain. It also helps the environment.

Learn more at www.nyc.gov or call 311.

Michael R. Bloomberg
Mayor

NYC

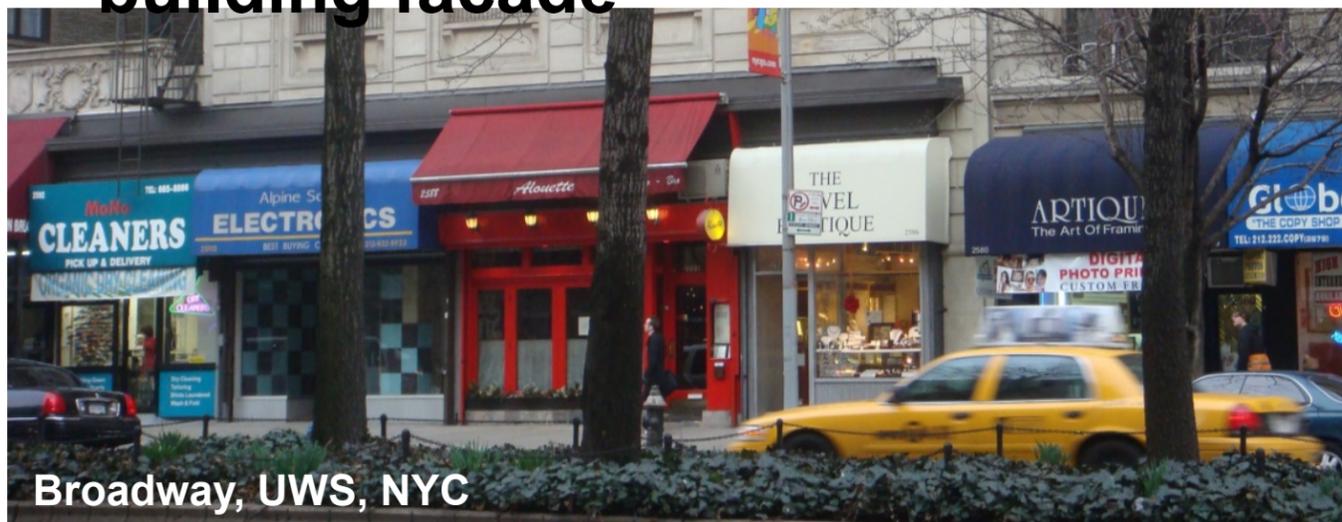


REBNY
REAL ESTATE BOARD OF NEW YORK

Site + Building Design

Building Exteriors: contributing to the pedestrian environment

environment

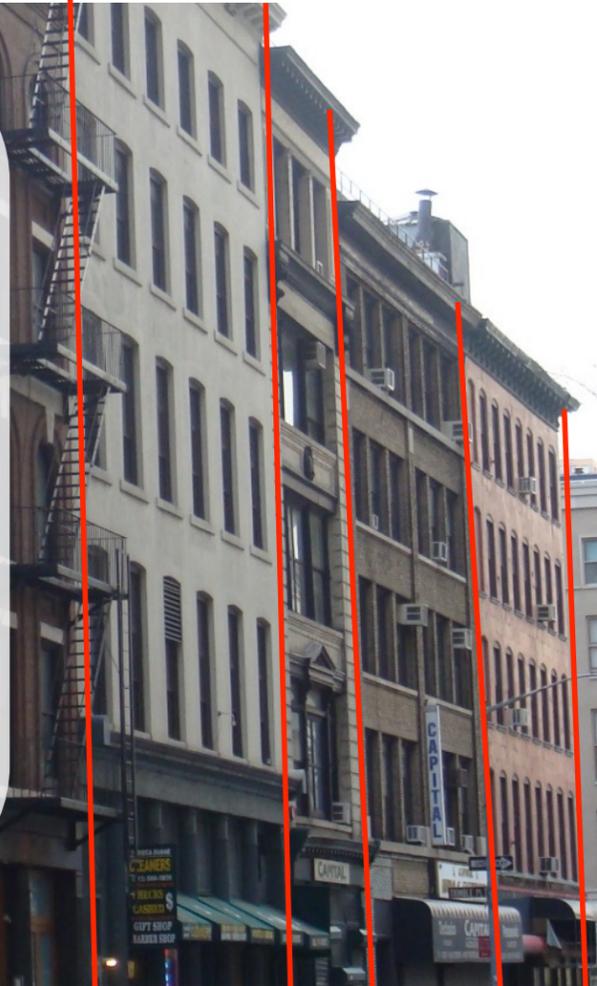


**ACTIVE
DESIGN**

Building Exteriors: contributing to the pedestrian

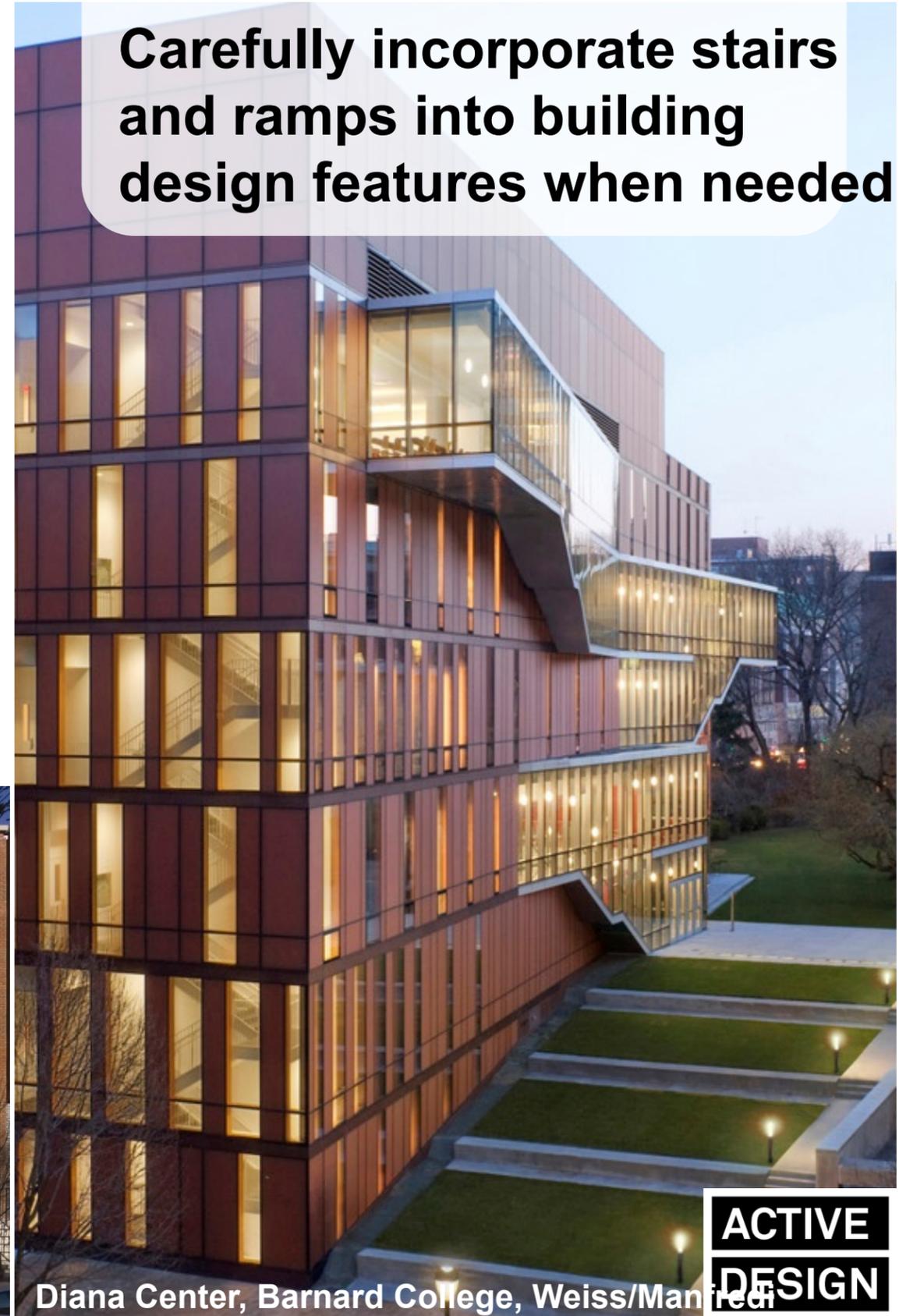
environment

Design building massing to enhance pedestrian realm, thinking about vertical divisions, variety and rhythms from the pedestrian's perspective



Duane Street, NYC

Carefully incorporate stairs and ramps into building design features when needed



**ACTIVE
DESIGN**



14 Townhouses, Brooklyn, Rogers Marvel

Diana Center, Barnard College, Weiss/Manfredi

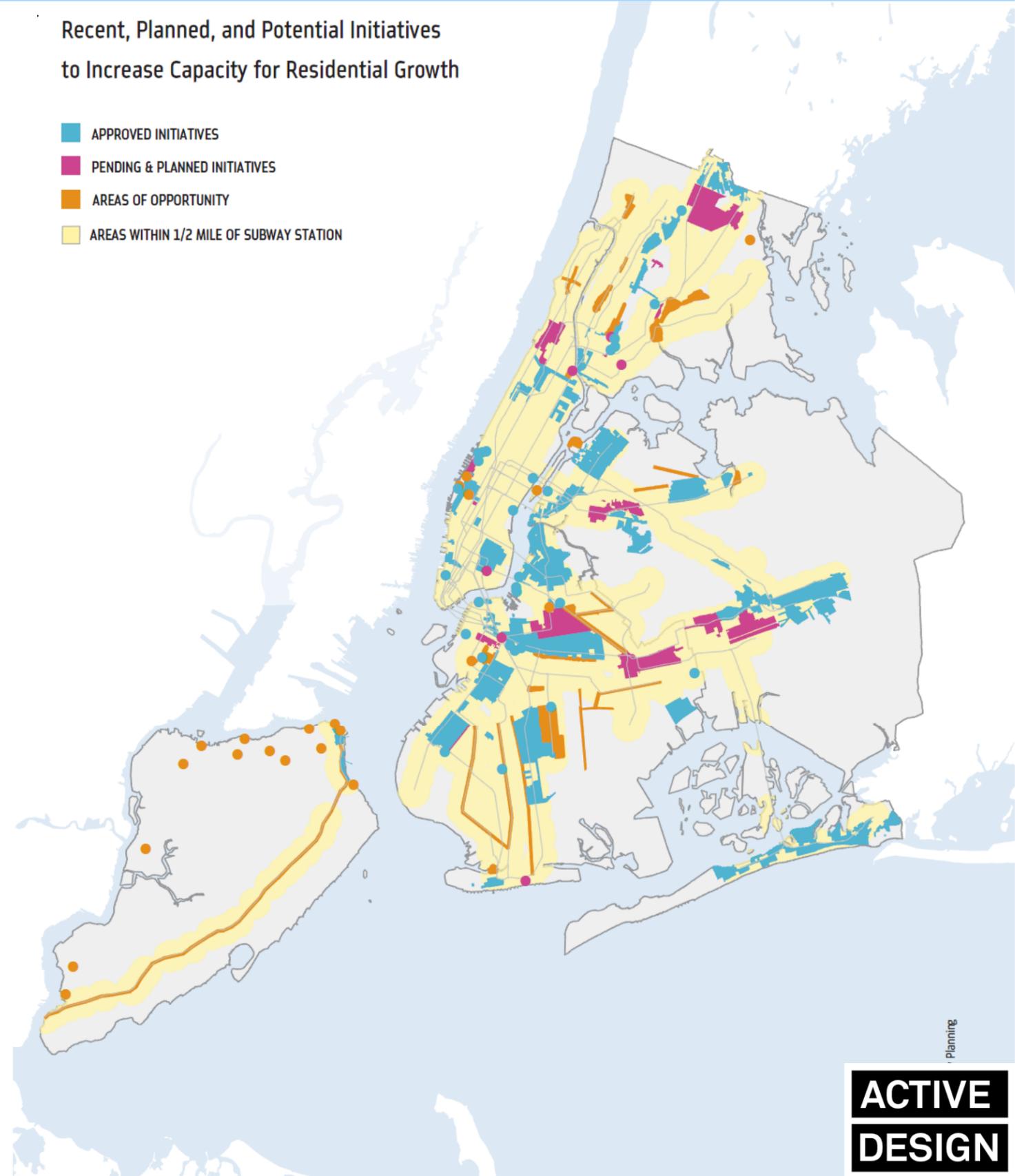
What are some of the recent city policies that align with active design goals?

Smart Growth

Focusing the development for **1 million** new people by the year **2030** near public transit access.

Recent, Planned, and Potential Initiatives to Increase Capacity for Residential Growth

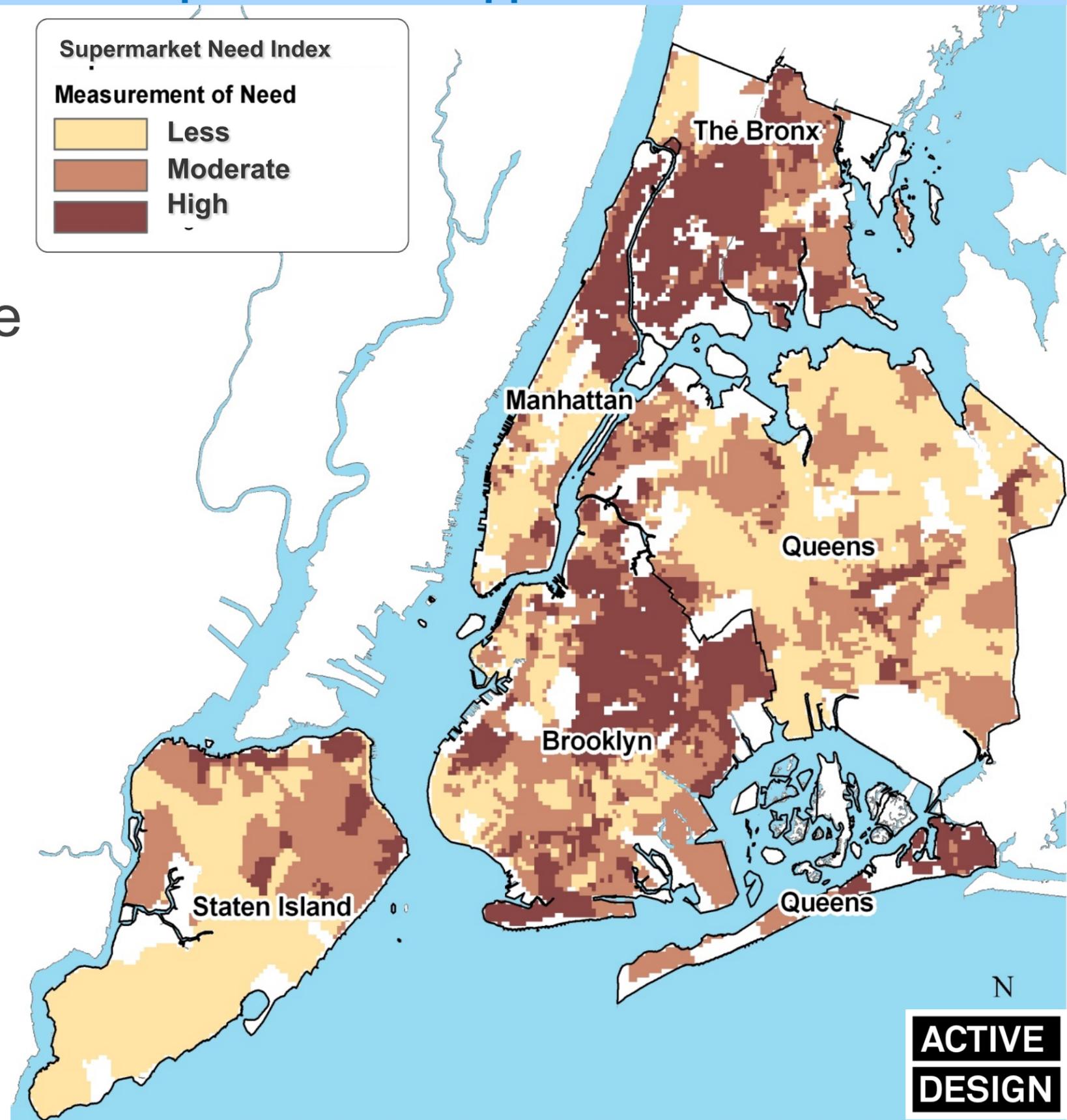
- APPROVED INITIATIVES
- PENDING & PLANNED INITIATIVES
- AREAS OF OPPORTUNITY
- AREAS WITHIN 1/2 MILE OF SUBWAY STATION



NYC FRESH: Food Retail Expansion to Support Health

Understanding where people have **limited access to fresh produce** +

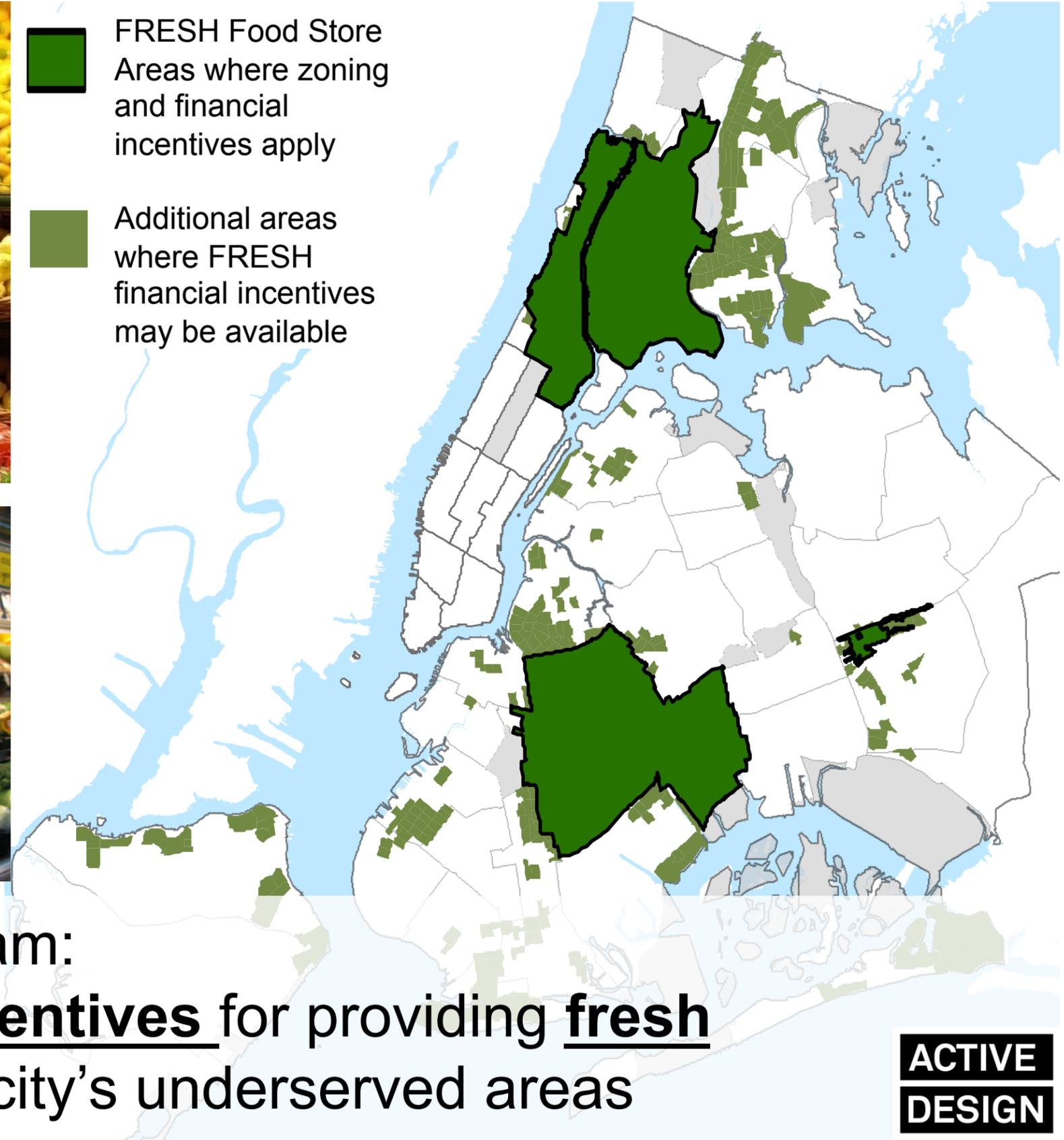
where the **highest rates of diabetes and obesity** are



NYC FRESH: Food Retail Expansion to Support Health



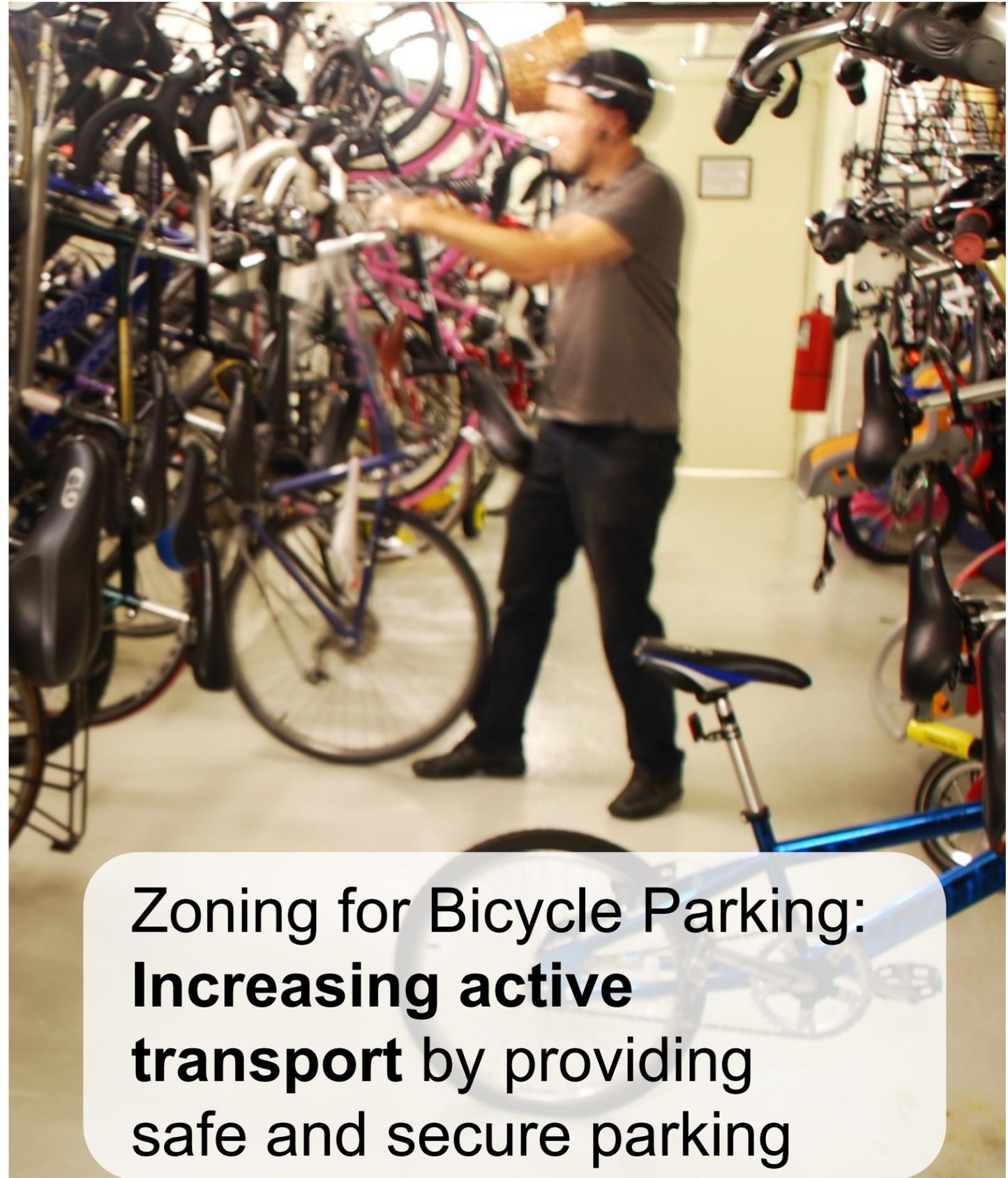
-  FRESH Food Store Areas where zoning and financial incentives apply
-  Additional areas where FRESH financial incentives may be available



NYC FRESH Program:
Zoning and tax incentives for providing **fresh food** options in the city's underserved areas

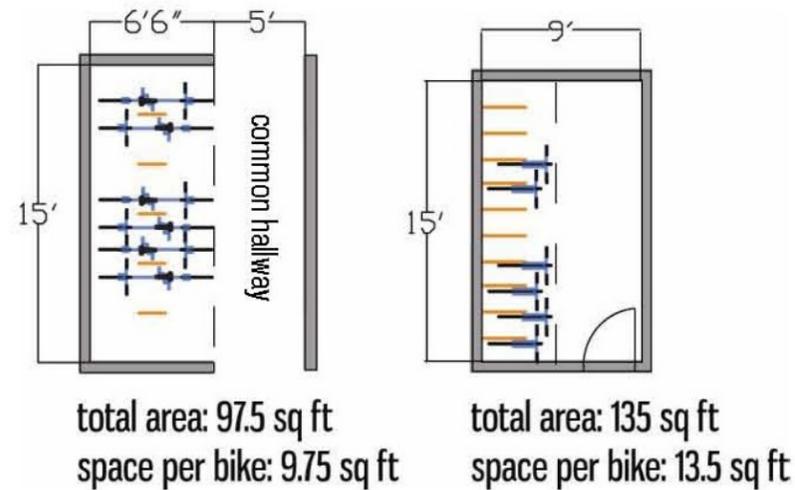
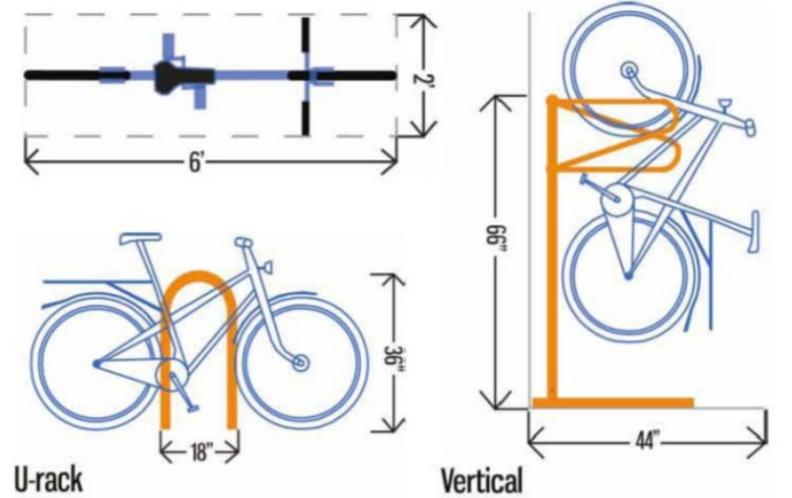
City Policy + Implementation

Zoning for Bicycle Parking



Zoning for Bicycle Parking:
Increasing active transport by providing safe and secure parking for bike commuters

Zoning for Bicycle Parking



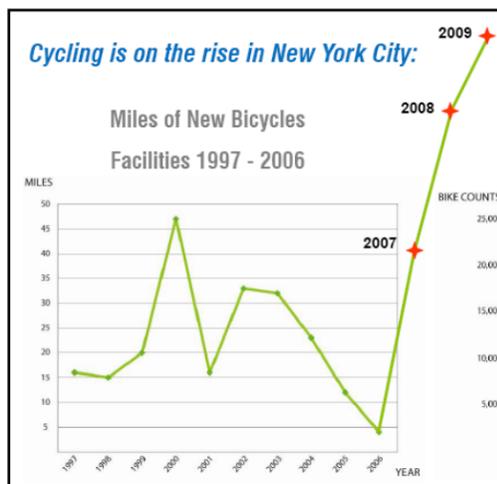
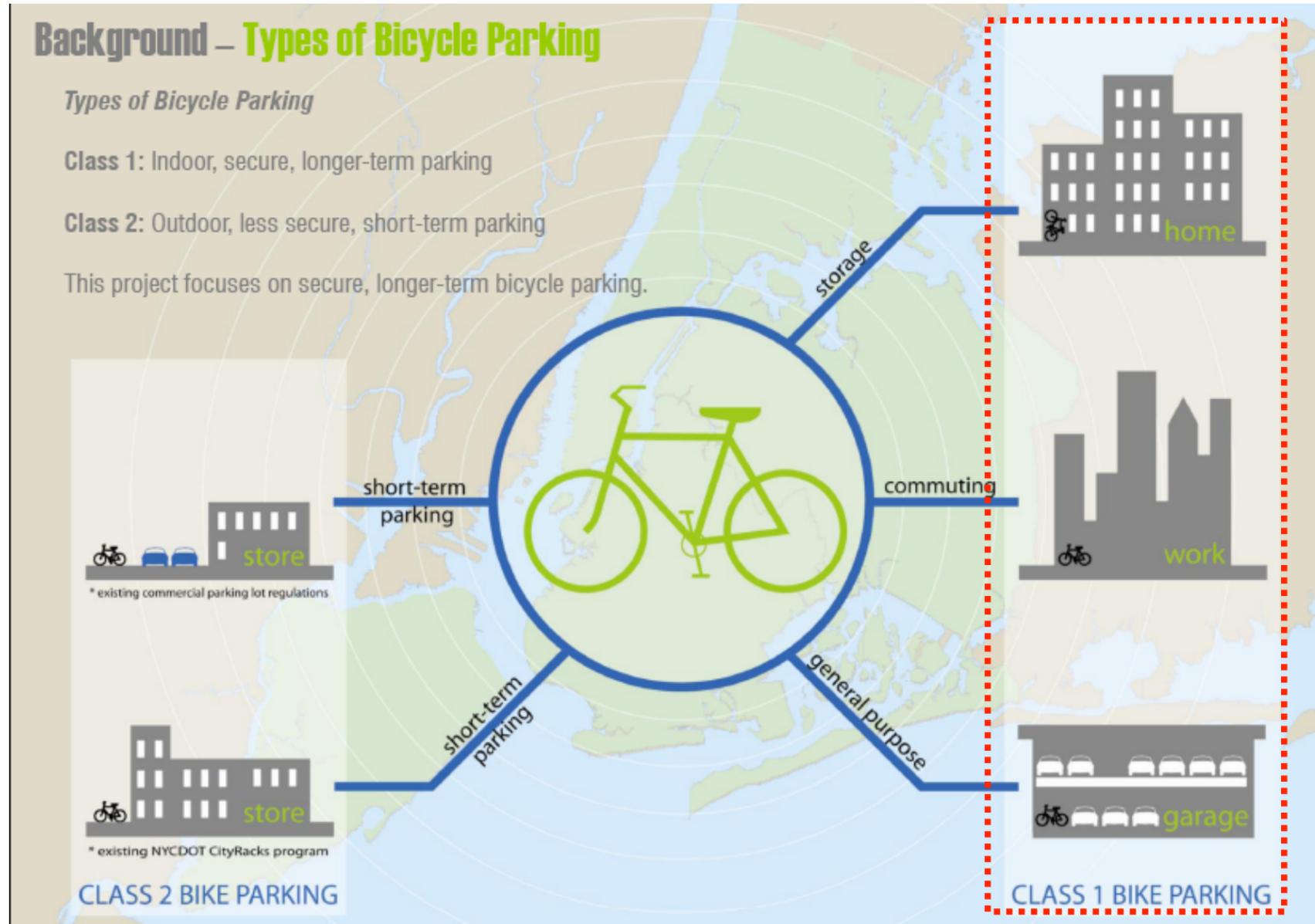
Background – Types of Bicycle Parking

Types of Bicycle Parking

Class 1: Indoor, secure, longer-term parking

Class 2: Outdoor, less secure, short-term parking

This project focuses on secure, longer-term bicycle parking.



Bicycle parking now required for new buildings, enlargements, conversions and public parking garages (floor area is discounted)

City Policy + Implementation

Residential Streetscape Preservation Text

Amendment



New York City Department of City

**ACTIVE
DESIGN**

Residential Streetscape Preservation Text Amendment



Too many curb cuts result in:

- 1. Unattractive streetscapes**
- 2. Loss of on-street parking**
- 3. Potential vehicular/pedestrian conflicts**
- 4. Loss of ground floor retail space in commercial and mixed-use districts**

Creating a more continuous and inviting pedestrian environment

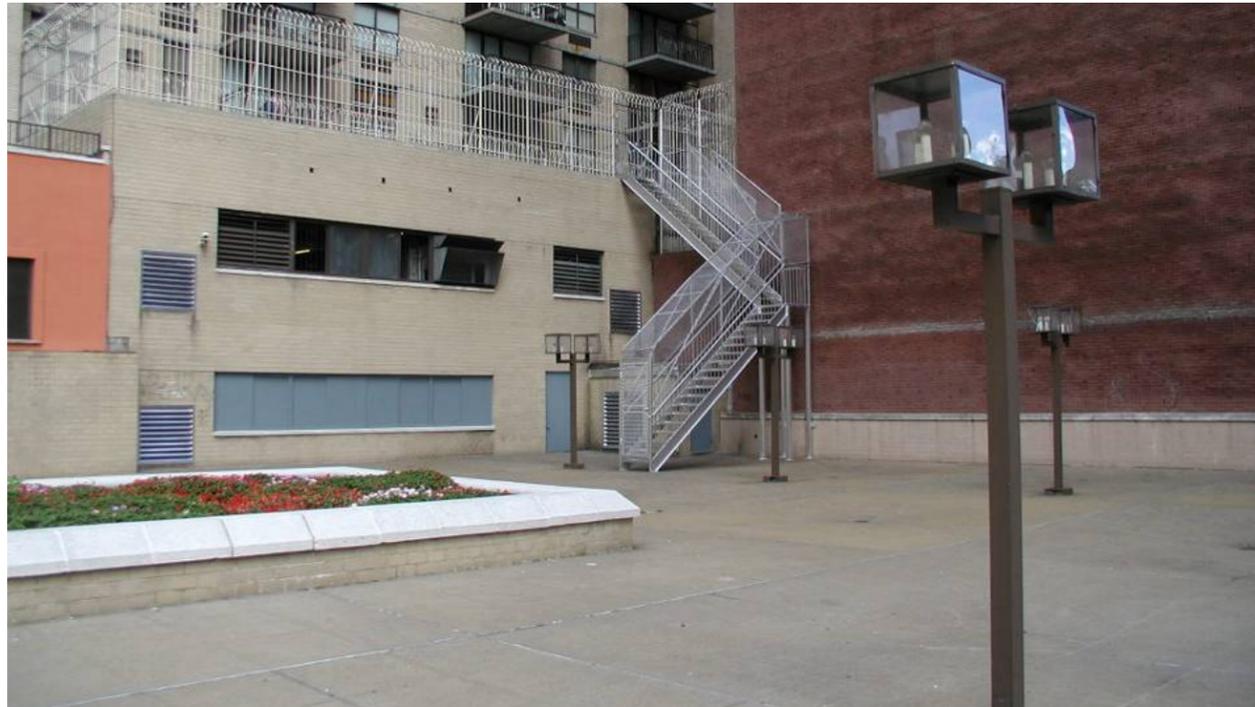
Residential Streetscape Preservation Text Amendment



Creating a more continuous and inviting pedestrian environment

City Policy + Implementation

Privately Owned Public Spaces (POPs)



Revised outdated design guidelines



Privately Owned Public Spaces (POPs)



- Seating Variety (backs + shade)
- No. Trees
- Groundcover

- Lighting
- Signage
- Entries on Spaces
- Orientation



City Policy + Implementation

Privately Owned Public Spaces (POPs)



City Policy + Implementation

Vision 2020: Comprehensive Waterfront Plan



VISION 2020

NEW YORK CITY COMPREHENSIVE WATERFRONT PLAN

**ACTIVE
DESIGN**

Vision 2020: Comprehensive Waterfront Plan

VISION 2020 GOALS

1. Expand public access.
2. Enliven the waterfront.
3. Support the working waterfront.
4. Improve water quality.
5. Restore the natural waterfront.
6. Enhance the Blue Network.
7. Improve government oversight.
8. Increase climate resilience.

<http://www.nyc.gov/html/dcp/html/cwp/index.shtml>

VISION 2020

NEW YORK CITY COMPREHENSIVE WATERFRONT PLAN

City Policy + Implementation

Vision 2020: Comprehensive Waterfront Plan



**ACTIVE
DESIGN**

City Policy + Implementation

Vision 2020: Comprehensive Waterfront Plan



**ACTIVE
DESIGN**

Car Share Zoning Text Amendment

APRIL 26, 2010



The off-street parking regulations in the City were written nearly a half century ago:

- Define 'car share' in the zoning resolution
- Establish rules for quantity and location

Car Share Zoning Text Amendment

12 car share vehicles would eliminate demand for an estimated **28-154** cars in the area

Up to 40% of total spaces



EXAMPLE

Size of facility : 40 spaces

Car sharing vehicles : up to 12 cars

Studies show people drive less, therefore taking more cars off the streets, reducing pollution and traffic congestion, and making a friendlier environment for the pedestrian to WALK!

City Policy + Implementation

Changing the form of the Public Right of Way





**89% OF THE ROAD SPACE FOR
VEHICLES 11% FOR PEOPLE**

**ACTIVE
DESIGN**



**89% OF THE ROAD SPACE FOR
VEHICLES 11% FOR PEOPLE**

**ACTIVE
DESIGN**

Changing the form of the Public Right of Way

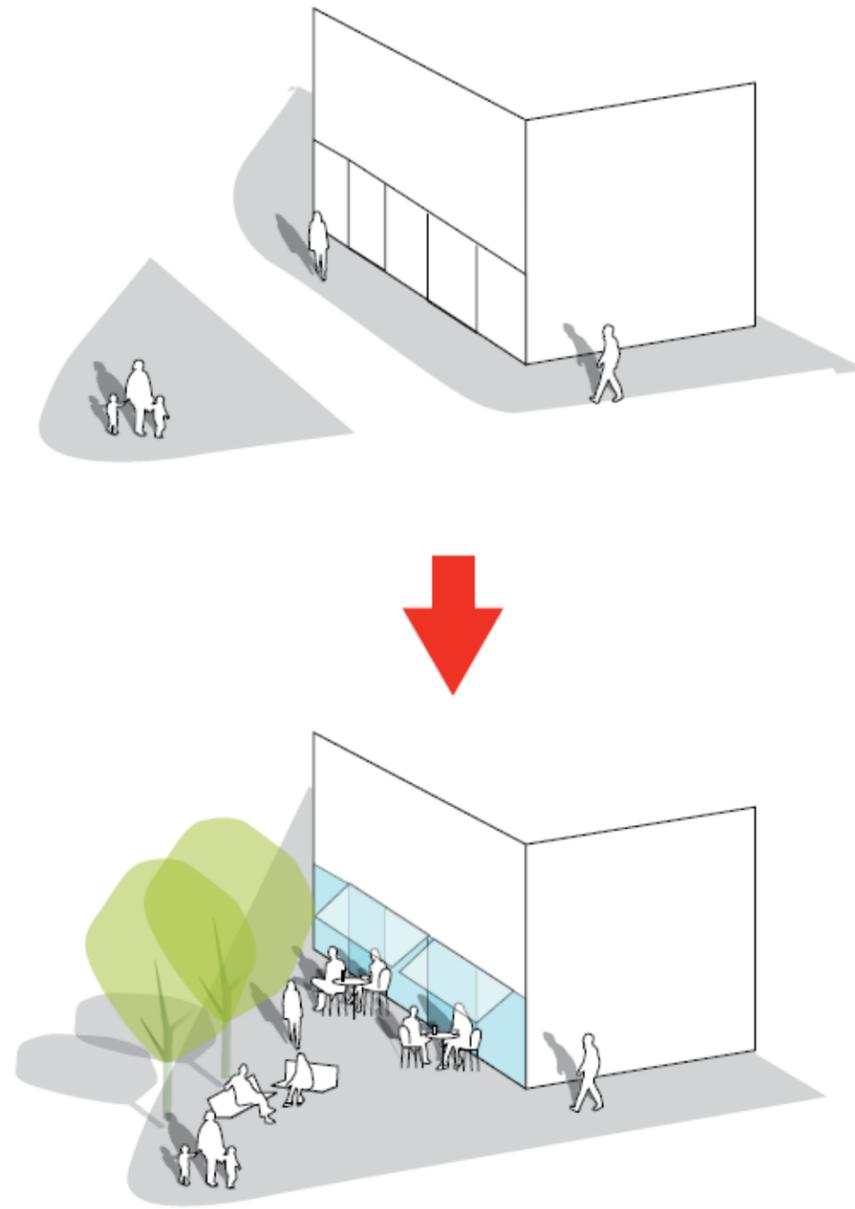
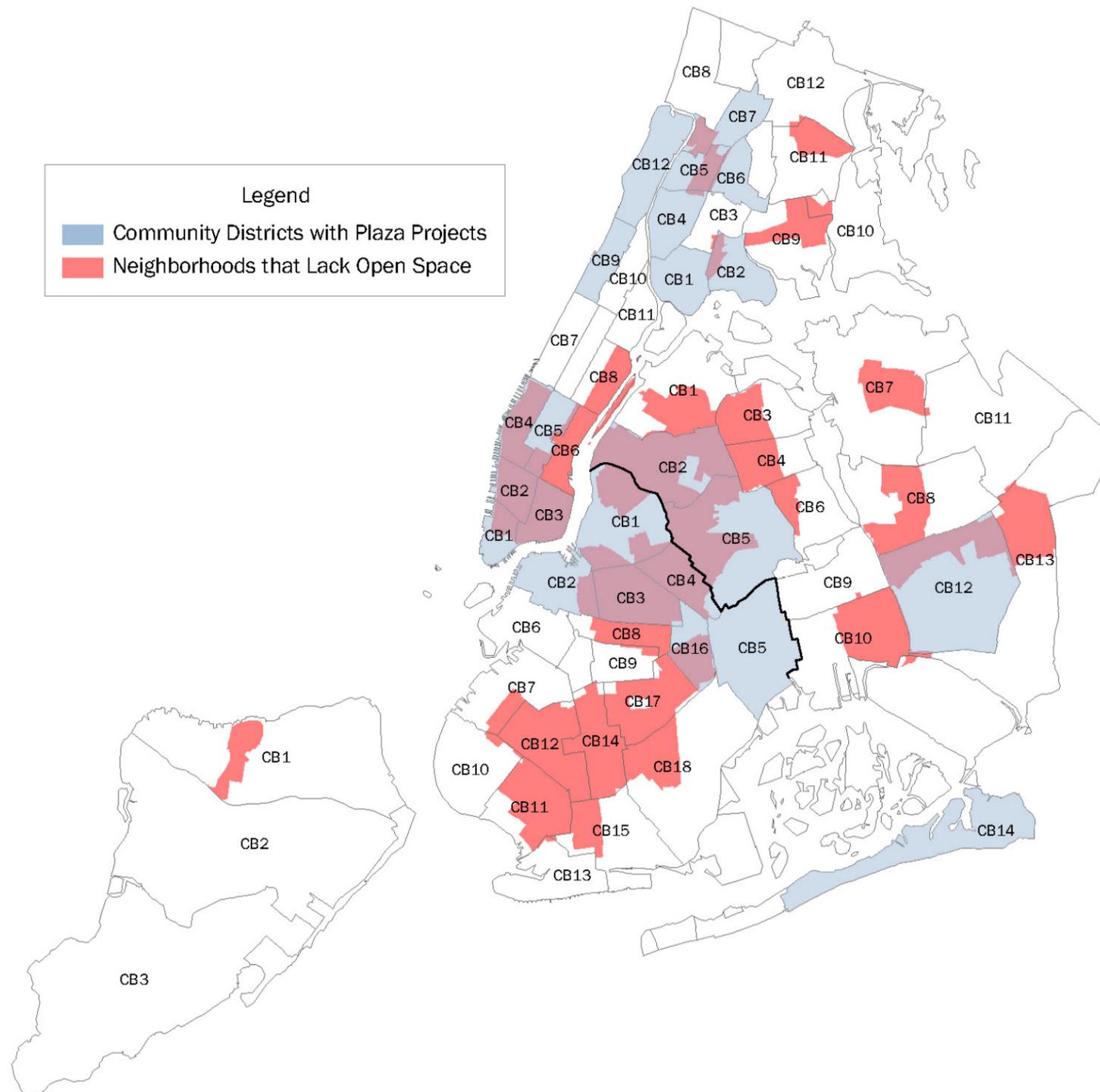


Pedestrian volumes up:

- 6% in Herald Square
- 11% in Times Square

City Policy + Implementation

Public Plaza Program



Sources:
 Neighborhoods that Lack Open Space: NYC Department of City Planning, August 2005.
 Other Data: NYC DOT, March 2012.

City Policy + Implementation

Public Plaza Program



**ACTIVE
DESIGN**

City Policy + Implementation

Bicycle Network

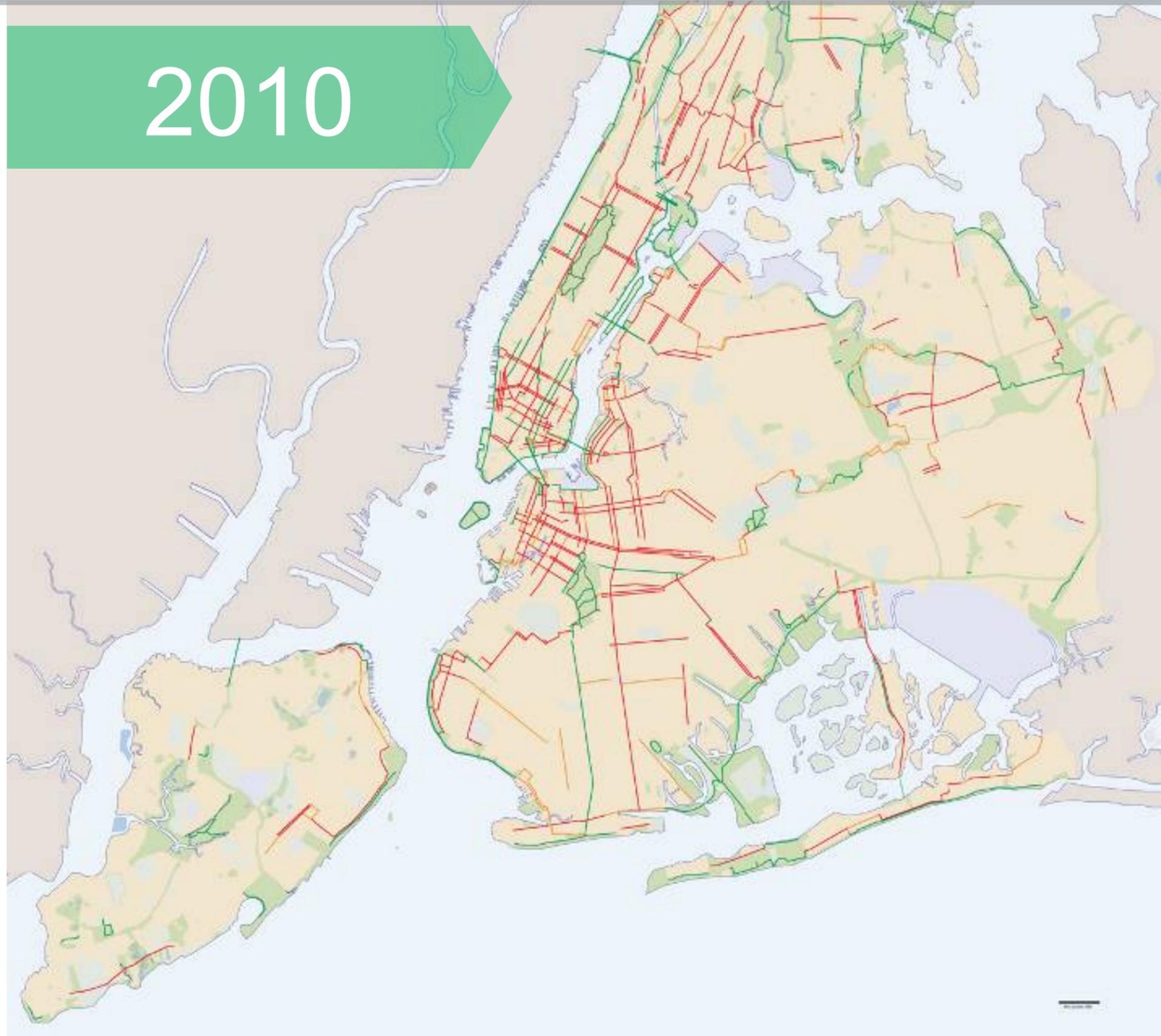
2005



**ACTIVE
DESIGN**

City Policy + Implementation
Bicycle Network

2010



**ACTIVE
DESIGN**

City Policy + Implementation Bicycling



Class I

Class I bike paths are physically separated from motor vehicle and pedestrian traffic



Class II

Class II on-street bike lanes are defined by a painted stripe



Class III

Class III bike routes are represented only by posted route signs

Class 1: Bike Path (2.1.2b)

Signal Protected Path

9th Avenue, 31st to 16th Streets, Manhattan



14 feet

Protected Path with Mixing Zones

Grand Street, Manhattan



8 feet

Class 2: Bike Lane (2.1.2a)

Buffered Lane

DeKalb Avenue, Brooklyn



8 feet

Standard Lane

20th & 21st Streets, Manhattan



5 feet

Class 3: Bike Route (Not Included in Manual)

Shared Lane

48th Street, Queens



None

A wide (13-foot) travel lane is preferred

Signed Route



None

A wide (13-foot) travel lane is preferred

City Policy + Implementation Bicycling

Annual NYC bicycle
counts 2000-2010:



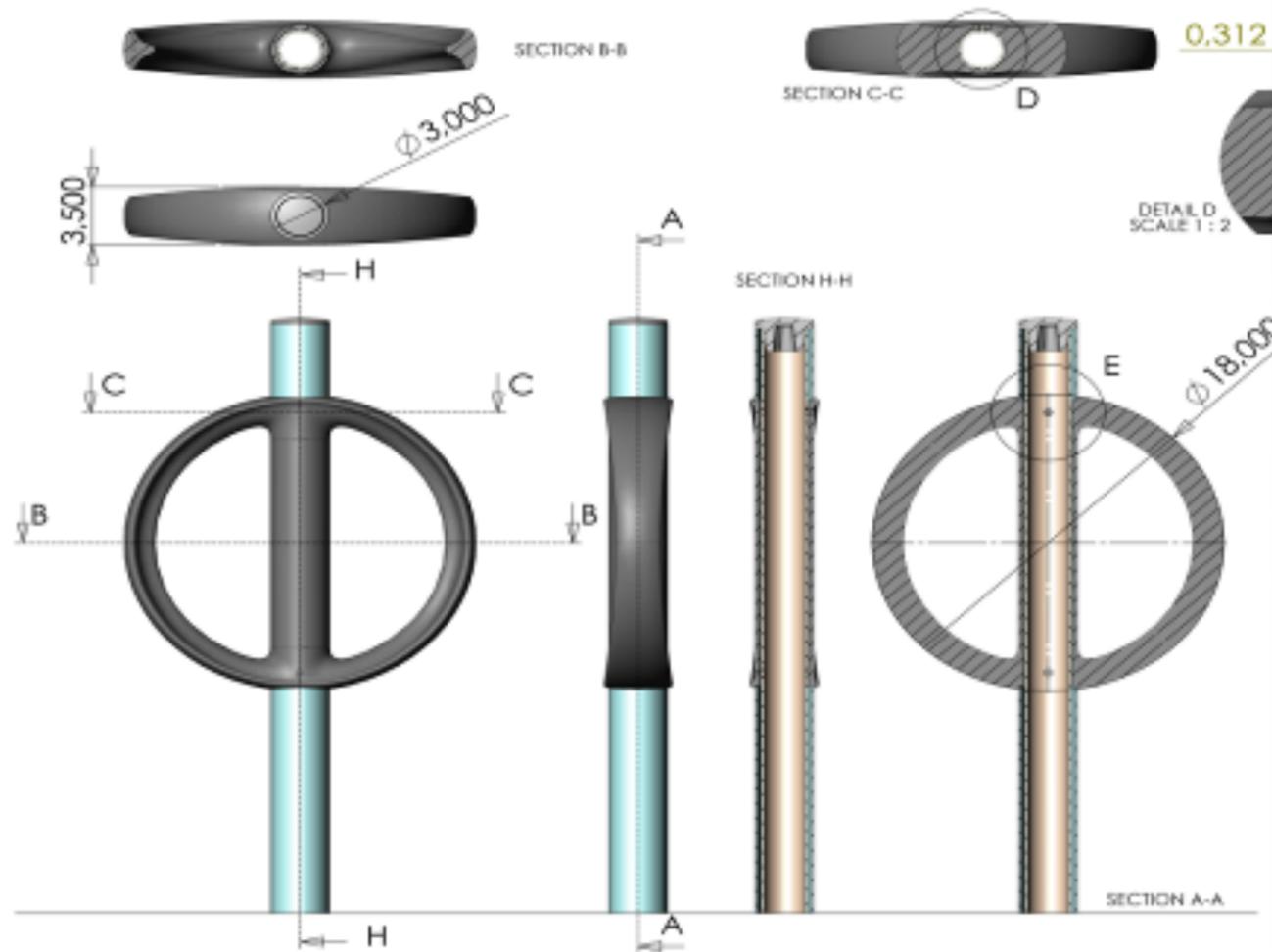
262%



the city's fastest growing mode of transportation

**ACTIVE
DESIGN**

City Policy + Implementation Bicycle Infrastructure



**ACTIVE
DESIGN**

City Policy + Implementation Programming: Summer Streets and Play Streets



**ACTIVE
DESIGN**

City Policy + Implementation Programming: Summer Streets and Play Streets



Results: in New York City from 2000 to 2010

30% reduction in traffic fatalities

10% growth in bus and subway ridership

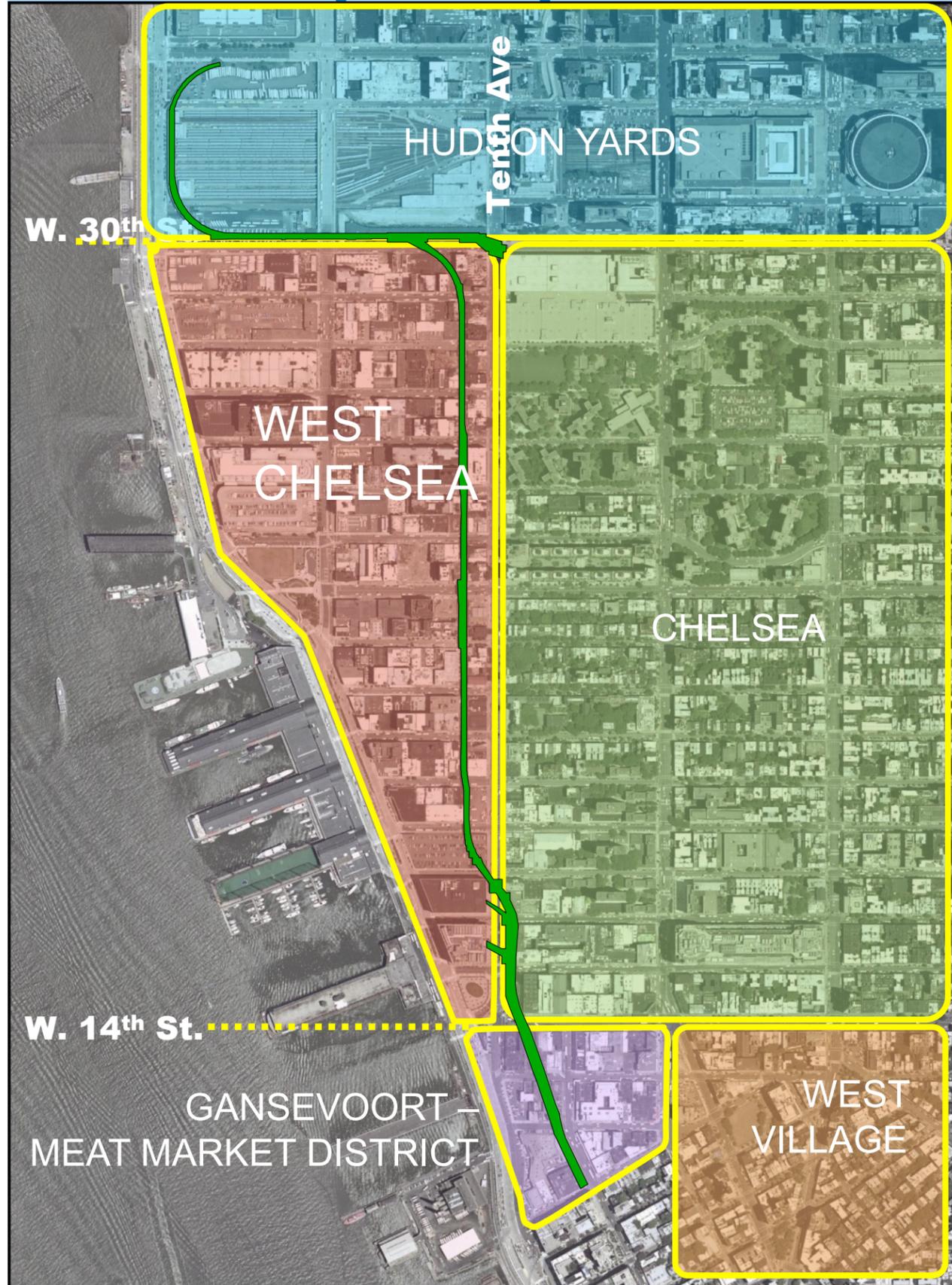
262% increase in commuter cycling

5% reduction in motor vehicle registrations

25% decline in citywide traffic volumes (2000-2009)

City Policy + Implementation

Public Open Spaces



FRIENDS OF THE HIGH LINE

Hudson River

Chelsea Piers

11th Ave

Estimated Start Dates

| | |
|-----------------|-----|
| Phase I | '05 |
| Phase II | '06 |
| Phase III | '08 |
| Property of NYC | TBA |

10th Ave

9th Ave

8th Ave

7th Ave

6th Ave

5th Ave

4th Ave

3rd Ave

2nd Ave

1st Ave

W. 33rd St.

W. 31st St.

W. 30th St.

W. 29th St.

W. 28th St.

W. 26th St.

W. 25th St.

W. 24th St.

W. 22nd St.

W. 22nd St.

W. 21st St.

W. 20th St.

W. 19th St.

W. 18th St.

W. 17th St.

W. 16th St.

W. 15th St.

W. 14th St.

W. 13th St.

Little W. 12th St.

Washington St.

Gansevoort St.

Chelsea Market

you are here

how to help

Quo usque tandem abutere, Catilina, patientia nostra quam diu etiam* furor iste tuus nos eludet quem ad finem* sese effrenata iactabit* audacia? nihiline te

auda Pal

ACTIVE DESIGN

the new gym... simply look to your right (West), over 14th St.

shown almost actual site

© 2008 Friends of the High Line. All rights reserved.

City Policy + Implementation

Public Open Spaces



**ACTIVE
DESIGN**

City Policy + Implementation

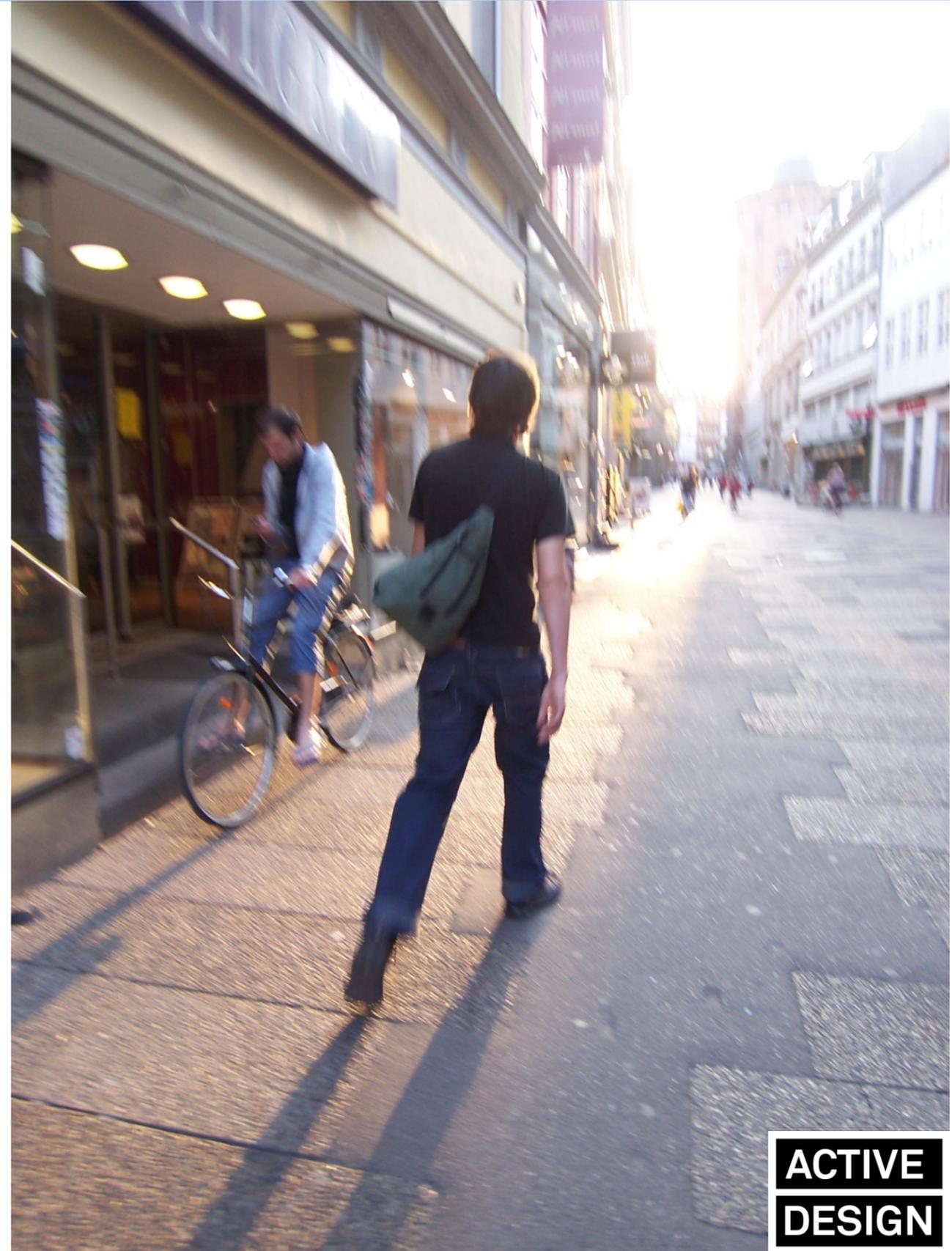
General Approach



**ACTIVE
DESIGN**

City Policy + Implementation
General Approach

**How do you judge?
The pedestrian comes first!**



**ACTIVE
DESIGN**

www.nyc.gov/adg

Thank you!