# West Harlem The Next NYC Tech Hub



Instructor: Patrice Derrington Special Guest: Rosemary Scanlon

Jacquelyne Sunwoo (UP)
Maryam Yaghoubi (UP)
Miranda Sugras (Arch)
Meng Cheng Tang (Arch)
Patrick Li (UP/RED)
Shahneez Haseeb (UP)



The University recognizes the importance of its location in New York City and seeks to link its research and teaching to the vast resources of a great metropolis....It expects all areas of the university to advance knowledge and learning at the highest level.

- Columbia Mission Statement

It's not about intelligence, it's about access and exposure.

- Clayton Banks

In-Common leads to Communicate, leads to Communal, leads to Community.

 Clayton Banks, paraphrasing Percy Sutton

The Characteristics of a Successful Hub

- Educational Facilities

- Government / Local Incentives

- Access

- Brand / Identity / Theme

- Transportation

#### The Characteristics of a Successful Hub

#### - Educational Facilities

Kendall Square: MIT

Brooklyn Tech Triangle: Berkeley College, New York University, Pratt Institute, etc.

West Harlem Tech Hub: Columbia University, CCNY, Barnard College, etc.

# **Anchors - Educational Institutions:** Columbia University Main Campus - Business School - School of Engineering - Graduate School of Architecture, Planning and preservation

# **Anchors - Educational Institutions:** Columbia University - Manhattanville - Columbia Business School - The Jerome L. Greene Science Center - Lenfest Center for the Arts

# **Anchors - Educational Institutions:** Community College of New York - CUNY - Center for Discovery and Innovation - Advanced Science Research Center - School of Architecture - The Grove School of Engineering - Zahn Center for Innovation - NY Structural Biology Center

# **Anchors - Educational Institutions:** Columbia University - Medical Center - Russ Berrie Medical Science Pavilion - Irving Cancer Research Center - Lasker Biomedical Research Building - Harkness Eye Institute Research Annex - The Neurological Institute on NY - NYSPI-Kolb Research Building

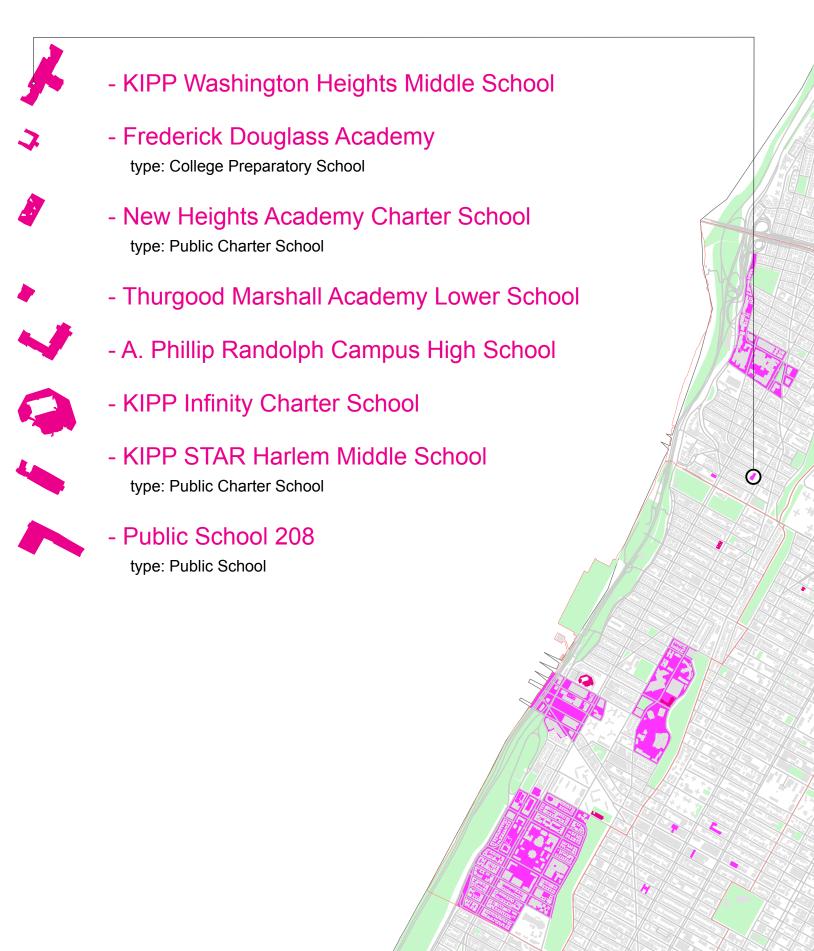
## Anchors - Educational Facilities:

Other Public, Private and Non-Profits



### Anchors - Educational Facilities:

Public School Grade 5 - 12



#### The Characteristics of a Successful Hub

#### - Educational Facilities

Kendall Square: MIT

Brooklyn Tech Triangle: Berkeley College, New York University, Pratt Institute, etc.

West Harlem Tech Hub: Columbia University, CCNY, Barnard College, etc.

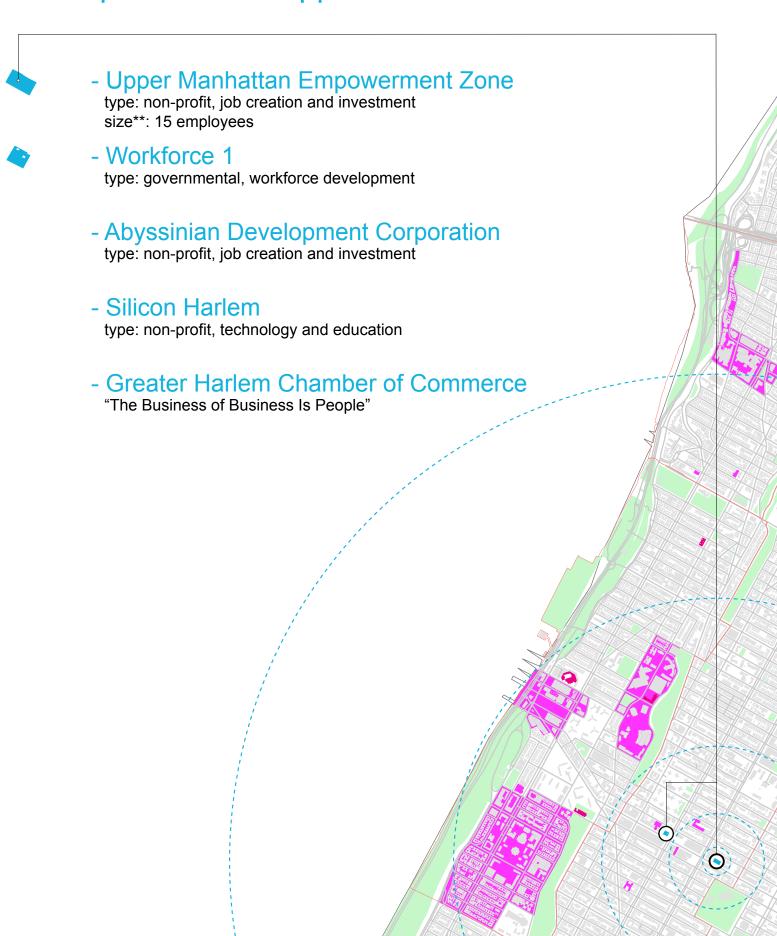
#### - Government / Local Incentives

Kendall Square: tax breaks, variations on local ordinance, upzoning

Brooklyn Tech Triangle: Real estate incentives, FAR bonuses

West Harlem Tech Hub: possible upzoning, tax breaks, zoning variances

# Anchors - Non Profits: Development and Support



#### The Characteristics of a Successful Hub

#### - Educational Facilities

Kendall Square: MIT

Brooklyn Tech Triangle: Berkeley College, New York University, Pratt Institute, etc.

West Harlem Tech Hub: Columbia University, CCNY, Barnard College, etc.

#### - Government / Local Incentives

Kendall Square: tax breaks, variations on local ordinance, upzoning

Brooklyn Tech Triangle: Real estate incentives, FAR bonuses

West Harlem Tech Hub: possible upzoning, tax breaks, zoning variances

#### - Access

Kendall Square: Community Supports the Growth of Kendall Square

Brooklyn Tech Triangle: Significant Number of Employees are Hired Locally

West Harlem Tech Hub:

#### The Characteristics of a Successful Hub

#### - Educational Facilities

Kendall Square: MIT

Brooklyn Tech Triangle: Berkeley College, New York University, Pratt Institute, etc.

West Harlem Tech Hub: Columbia University, CCNY, Barnard College, etc.

#### - Government / Local Incentives

Kendall Square: tax breaks, variations on local ordinance, upzoning

Brooklyn Tech Triangle: Real estate incentives, FAR bonuses

West Harlem Tech Hub: possible upzoning, tax breaks, zoning variances

#### - Access

Kendall Square: Community Supports the Growth of Kendall Square

Brooklyn Tech Triangle: Significant Number of Employees are Hired Locally

West Harlem Tech Hub:

#### - Brand / Identity / Theme

Kendall Square: MIT as a Global Brand, Biotechnology, Information Technology

Brooklyn Tech Triangle: Information Technology, Digital Media, Manufacturing & Craft

West Harlem Tech Hub: Columbia as a Global Brand, Rich History, Cultural Significance

#### Incubators: Other Institutions

#### - Audubon Business and Tech Centers

type: bioscience size\*\*: 100,000 sq ft

notes: (re-allocated)Columbia University reserach facility,

commercial lab space

#### Harlem Collective

type: coworking size\*\*: 7,000 sq ft

#### Zahn Innovation Center - CUNY

type: entrepreneurship - products notes: Tech and Social focus, for sutdents

#### - Harlem Biospace

type: bioscience size\*\*: 2,300 sq ft

notes: Professional biomedical innovation

#### - Harlem Garage

type: coworking size\*\*: 6,000 sq ft

notes: Tutoring start-ups, workshops for area;

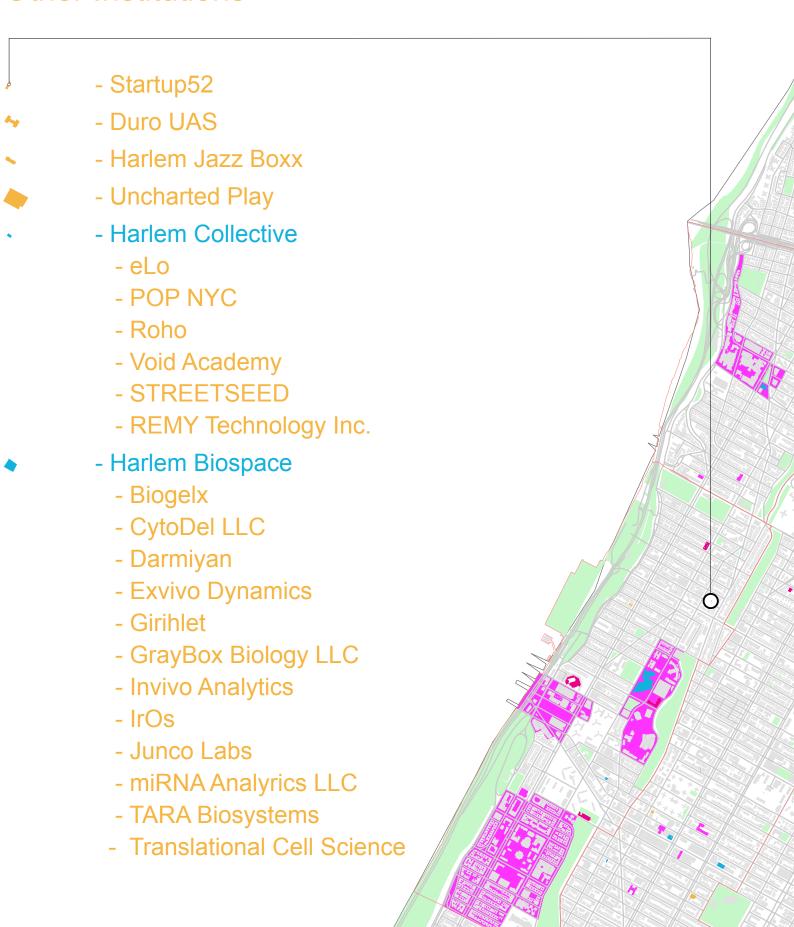
#### - Hot Bread Kitchen

type: food start-up size\*\*: 4,600 sq ft

notes: Incubator for restaurant start-ups;

vastly improves success rate of new restaurants

## Start Ups: Other Institutions



#### The Characteristics of a Successful Hub

#### - Educational Facilities

Kendall Square: MIT

Brooklyn Tech Triangle: Berkeley College, New York University, Pratt Institute, etc.

West Harlem Tech Hub: Columbia University, CCNY, Barnard College, etc.

#### Government / Local Incentives

Kendall Square: tax breaks, variations on local ordinance, upzoning

Brooklyn Tech Triangle: Real estate incentives, FAR bonuses

West Harlem Tech Hub: possible upzoning, tax breaks, zoning variances

#### - Access

Kendall Square: Community Supports the Growth of Kendall Square

Brooklyn Tech Triangle: Significant Number of Employees are Hired Locally

West Harlem Tech Hub:

#### - Brand / Identity / Theme

Kendall Square: MIT as a Global Brand, Biotechnology, Information Technology

Brooklyn Tech Triangle: Information Technology, Digital Media, Manufacturing & Craft

West Harlem Tech Hub: Columbia as a Global Brand, Rich History, Cultural Significance

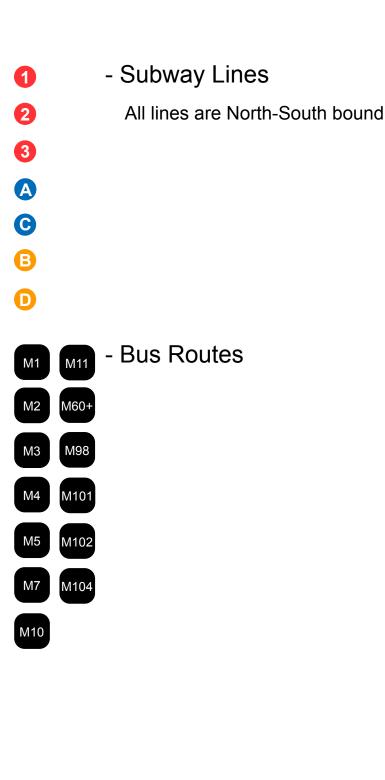
#### - Transportation

Kendall Square: MBTA Red Line, Four MBTA Bus Routes, Private Shuttle Services

Brooklyn Tech Triangle: Multiple Subway lines, Multiple Bus Routes, Shuttle Services

West Harlem Tech Hub: Multiple Subway Lines and Bus Routes, Private Shuttle Services

# Transportation: Subway & Bus Routes



#### **Next Steps**

#### 1 Infrastructure Issues

- Transportation access
- Broadband

#### 2 Community Outreach

- Greater Harlem Congressional Congress and Gail Brewer
- Upper Manhattan Empowerment Zone
- Abyssinian Development Corporation

#### 3 Institutional Outreach

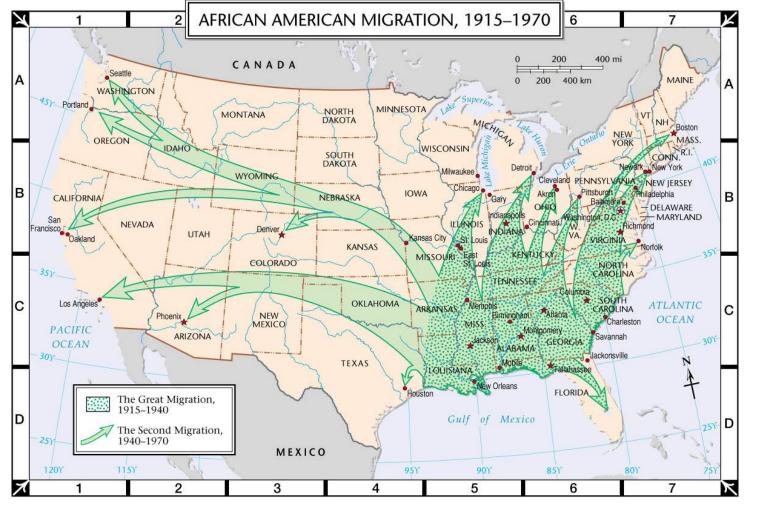
- Silicon Harlem
- CUNY
- Rutgers

#### 4 Capital Outreach

- NYC Economic Development Corp.
- BRISC (UMEZ loans)
- Initiative for a Competitive Inner City

#### 5 Branding and Vision

- Story of Harlem
- Diversity, passion, talent of neighborhood
- Columbia + Harlem



#### Harlem Related Poem Content Details BY LANGSTON HUGHES

What happens to a dream deferred?

Does it dry up
like a raisin in the sun?
Or fester like a sore—
And then run?
Does it stink like rotten meat?
Or crust and sugar over—
like a syrupy sweet?

Maybe it just sags like a heavy load.

Or does it explode?





One-Way Ticket: Jacob Lawrence's Migration Series and Other Visions of the Great Movement North

#### The Harlem Renaissance of the 1920s





#### "Take The A Train"

Billy Strayhorn for the Duke Ellington Orchestra

You must take the A train
To go to Sugar Hill way up in Harlem

If you miss the A train You'll find you missed the quickest way to Harlem

Hurry, get on, now it's coming Listen to those rails a-humming

All aboard, get on the A train Soon you will be on Sugar Hill in Harlem

## **Education Level:**



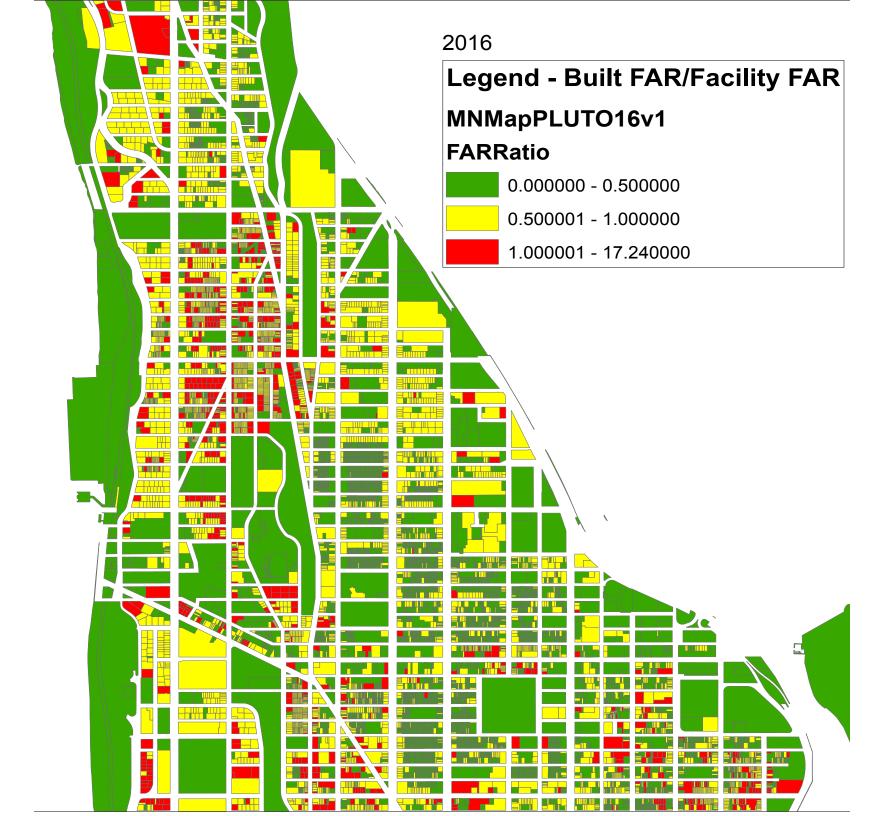
# Income Level: Median Household Income Median Household Income (in thousands)

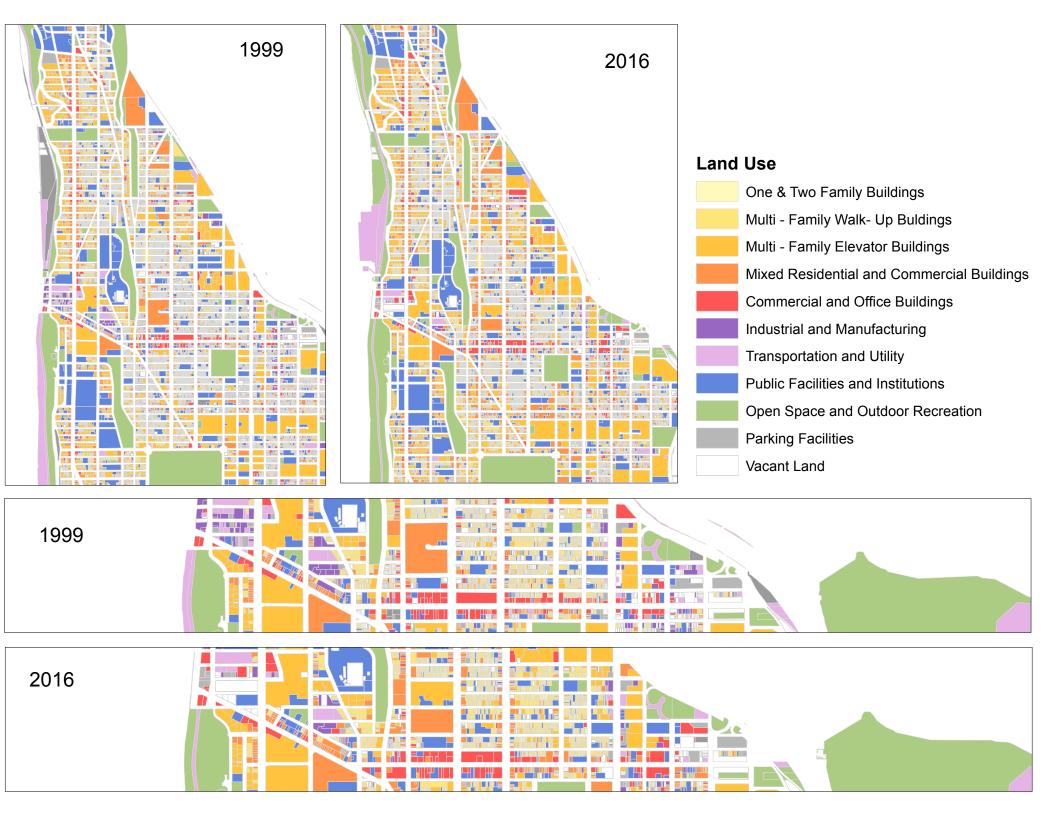
39

100

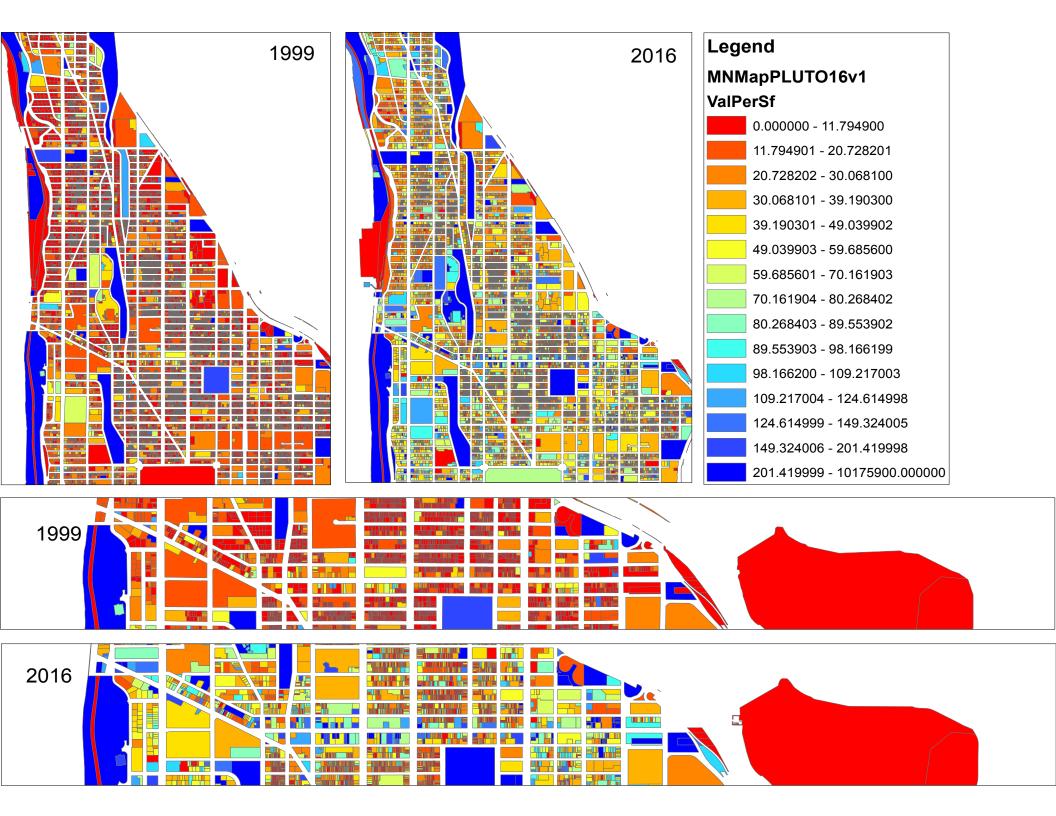
150

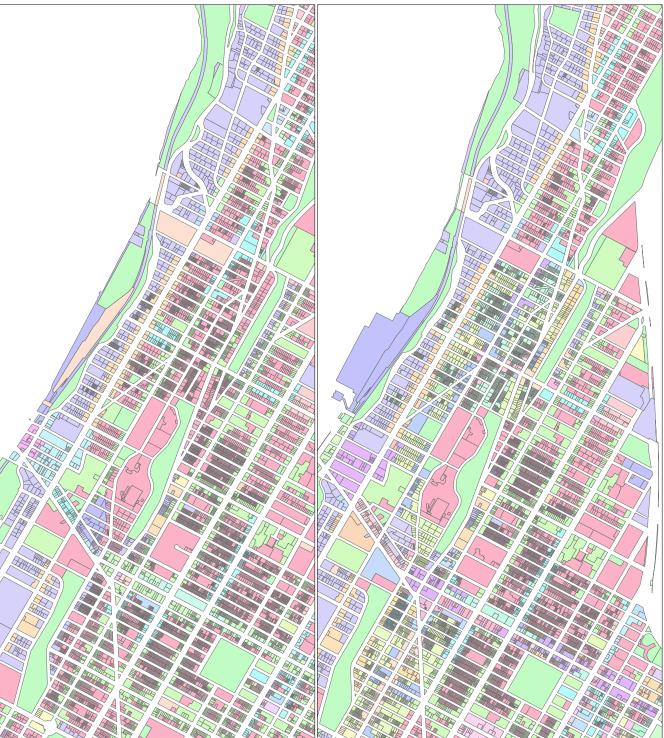
(Source: 2014 ACS 5-Year Estimates)











nn_r	mappluto_1999b2	C1-5/R9X	C2-5/R8B/EC-2	C5-3/TMU	C6-4X	R10A/PI
	<all other="" values=""></all>	C1-5/R9X/LH-1A	C2-5/R8B/EC-3	C5-5/LM	C6-5.5/MID	R10A/TA
AllZo	ning1	C1-6	C2-5/R8B/TA	C5-P/MID	C6-5/HY	R10H
		C1-6A	C2-5/R8X/TA	C6-1	C6-5/MID	R10H/MID
	BPC/BPC	C1-6A/TA	C2-5/R9	C6-1/LI	C6-6.5/MID	R10H/PI
	C1-2/R7-2	C1-7	C2-5/R9/CL	C6-1/MMU	C6-6/HY	R3-2
	C1-3/R6	C1-7A	C2-5/R9/TA	C6-1/TA	C6-6/MID	R3-2/GI
	C1-3/R7-2	C1-7A/HY	C2-6	C6-1/US	C6-7/HY	R5
	C1-4/R6A	C1-8	C2-6A	C6-1G	C6-7/MID	R6
	C1-4/R7-2	C1-8/CL	C2-7	C6-1G/LI	C6-7T/MID	R6/HSQ
	C1-4/R7-2/PC	C1-8/TA	C2-7/CL	C6-1G/TA	C6-9/LM	R6/LC
	C1-4/R7-2/TA	C1-8A	C2-7A	C6-2	C8-3	R6A
	C1-4/R7A	C1-8A/EC-2	C2-7A/EC-2	C6-2/CL	C8-4	R6A/125
	C1-4/R7B	C1-8A/TA	C2-8	C6-2/HY	C8-4/TA	R7-1
	C1-4/R7D	C1-8X	C2-8/EC-2	C6-2/LI	M1-1	R7-2
	C1-4/R8	C1-8X/LH-1A	C2-8/HY	C6-2/MMU	M1-1/MMU	R7-2/125
	C1-4/R8A	C1-9	C2-8/TA	C6-2/WCH	M1-2	R7-2/PC
	C1-4/R8A/MMU	C1-9/EC-2	C2-8A	C6-2A	M1-2/MMU	R7-2/PI
	C1-4/R9/TA	C1-9/LH-1A	C2-8A/EC-3	C6-2A/LM	M1-4	R7-2/SRI
	C1-5/C4-4D	C1-9/MID	C2-8A/TA	C6-2A/TA	M1-4/LM	R7-2/TA
	C1-5/R10	C1-9/PI	C4-2F	C6-2A/TMU	M1-4/TA	R7A
	C1-5/R10/MID	C1-9/TA	C4-4	C6-2A/US	M1-5	R7A/125
	C1-5/R10/MP	C1-9A	C4-4A	C6-2A/WCH	M1-5/CL	R7A/MMU
	C1-5/R10/MP/LH-1A	C1-9A/TA	C4-4A/125	C6-2G	M1-5/HY	R7A/MX-15
	C1-5/R10/PI	C2-1/R8	C4-4D	C6-2G/LI	M1-5/MX-6	R7B
	C1-5/R10A	C2-4/R6A	C4-4D/125	C6-2M	M1-5/R7-2/MX-15	R7B/LH-1
	C1-5/R10A/FC-2	C2-4/R6A	C4-4D/125	C6-2W	M1-5/R7X/MX-6	R7B/TA
	C1-5/R10A/LH-1A	C2-4/R7-2/125	C4-5/I C	C6-3/125	M1-5/WCH	R8
	C1-5/R10A/TA	C2-4/R7A	C4-5/SRI	C6-3/125	M1-5/WCH	R8/CL
	C1-5/R6	C2-4/R7A/125	C4-5/5R1	C6-3/CL C6-3/HY	M1-5A	R8/EC-2
	C1-5/R6A	C2-4/R7B	C4-5X	C6-3/H1	M1-5B	R8/EC-3
	C1-5/R7-2	C2-4/R7D	C4-5X	C6-3/EI	M1-5M/US	R8/L
	C1-5/R7-2 C1-5/R7-2/PI	C2-4/R7D	C4-6/LM	C6-3/TMU	M1-5M/US	R8/LM
	C1-5/R7-2/PI	C2-4/R8A	C4-6/PI	C6-3/TMU C6-3/WCH	M1-6/CL	R8/MID
	C1-5/R7-2/IA C1-5/R7A	C2-4/R8A C2-5/C4-2F	C4-6/PI C4-6A	C6-3/WCH	M1-6/GC	R8/TA
	C1-5/R7A C1-5/R7A/TA	C2-5/C4-2F	C4-6A/FC-3	C6-3A/TA	M1-6/GC M1-6/HSQ	R8/TA
	C1-5/R7B	C2-5/R10	C4-7	C6-3A/TMU	M1-6/MID	R8A/TA
	C1-5/R7X	C2-5/R10/CL	C4-7/125	C6-3A/WCH	M1-6D	R8B
	C1-5/R8	C2-5/R10/TA	C4-7/CL	C6-3X	M2-1	R8B/EC-2
	C1-5/R8/CL	C2-5/R10A	C4-7/L	C6-3X/CL	M2-2	R8B/EC-3
	C1-5/R8/EC-2	C2-5/R10A/EC-2	C5-1	C6-3X/US	M2-3	R8B/LH-1
	C1-5/R8A	C2-5/R10A/TA	C5-1/MID	C6-4	M2-3/CL	R8B/LH-1A
	C1-5/R8A/EC-2	C2-5/R7-2	C5-1/MP	C6-4.5/MID	M2-4	R8B/MID
	C1-5/R8A/TA	C2-5/R7-2/TA	C5-1/MP/LH-1A	C6-4/CL	M2-4/CL	R8B/MP
	C1-5/R8B	C2-5/R7A	C5-1/PI	C6-4/HY	M3-1	R8B/MP/LH-1
	C1-5/R8B/EC-3	C2-5/R7A/TA	C5-1A	C6-4/LM	M3-2	R8B/PI
	C1-5/R8B/LH-1A	C2-5/R7B	C5-2	C6-4/MID	M3-2/CL	R8B/PI/LH-1A
	C1-5/R8B/MP	C2-5/R8	C5-2.5	C6-4/TMU	PARK	R8B/TA
	C1-5/R8B/MP/LH-1A	C2-5/R8/CL	C5-2.5/MID	C6-4/US	R10	R9
	C1-5/R8B/TA	C2-5/R8/WCH	C5-2/MID	C6-4/WCH	R10/PI	R9/CL
	C1-5/R9	C2-5/R8A	C5-2/TA	C6-4A	R10/PI/LH-1A	R9/PI
	C1-5/R9/EC-2	C2-5/R8A/CL	C5-2/U	C6-4A/TMU	R10/TA	R9A
	C1-5/R9/PI	C2-5/R8A/EC-2	C5-3	C6-4A/US	R10A	R9X
	C1-5/R9A	C2-5/R8A/HY	C5-3/LM	C6-4M	R10A/EC-3	R9X/LH-1A
	C1-5/R9A/EC-3	C2-5/R8B	C5-3/MID	C6-4M/GC	R10A/L	ZNA



## Pedestrian Experience:

Kendall and Brooklyn

VS.

East Harlem





















#### Columbia:

#### Points of Intervention

