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# BY THE NUMBERS: Discussions on Density
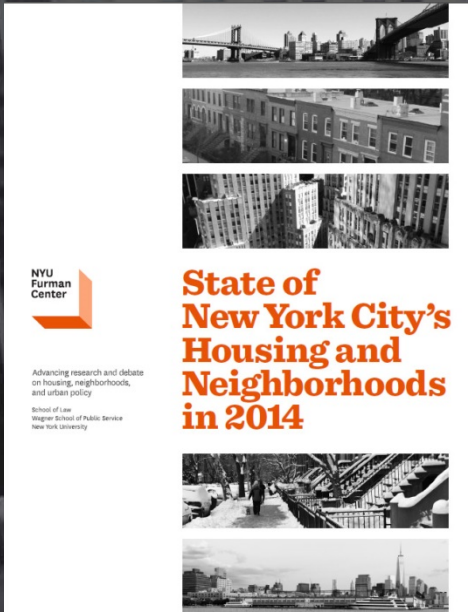
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# State of New York City's Housing and Neighborhoods in 2014

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# 1. Focus on Density

# 2. City-Wide Analysis

# 3. City, Borough, and Community District Data

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# MN02 Greenwich Village/Soho[1]

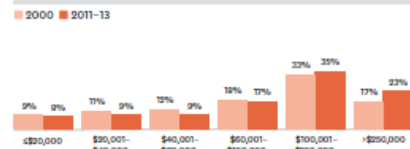| Single-Year Indicators | 2013 | Rank |
|---|---|---|
| • Population | 151,858 | 24 |
| • Population density (1,000 persons per square mile) | 52.2 | 16 |
| • Racial diversity index | 0.45 | 47 |
| • Income diversity ratio | 6.4 | 15 |
| • Rental vacancy rate | 3.9% | 19 |
| Rent-stabilized or rent-controlled units (forthcoming)[3] | – | – |
| Public and other income-restricted subsidized rental units[3] | 7.6% | 32 |
| Median asking rent | $3,400 | 4 |
| Housing units in FEMA preliminary flood hazard areas[4] | 10.9% | 19 |
| Residential units within 1/4 mile of a park | 99.2% | 6 |
| Land with unused zoning capacity | 14.8% | 57 |

| Median Rent[*] | | 2005–07 | 2011–13 | % Change | 2011–13 Rank |
|---|---|---|---|---|---|
| All renters | MN02 | $2,092 | $2,375 | 13.5% | 1 |
| | NYC | $1,116 | $1,226 | 9.9% | – |
| Recent movers | MN02 | $2,706 | $2,770 | 2.4% | 1 |
| | NYC | $1,344 | $1,469 | 9.3% | – |

## Distribution of Gross Rent, 2011–2013

<$1,000   $1,000–$1,499   $1,500–$1,999   ≥$2,000

| | <$1,000 | $1,000–$1,499 | $1,500–$1,999 | ≥$2,000 |
|---|---|---|---|---|
| MN02 | 15.4% | 10.3% | 11.8% | 62.6% |
| NYC | 34.0% | | 34.7% | 17.5% | 14.4% |

| Housing | 2000 | 2007 | 2010 | 2013 | 2014 | 2000 Rank | 2013–14 Rank |
|---|---|---|---|---|---|---|---|
| Units authorized by new residential building permits | 31 | 219 | 0 | 268 | 224 | 53 | 21 |
| Units issued new certificates of occupancy | 19 | 237 | 237 | 26 | 7 | 50 | 55 |
| • Homeownership rate | 25.9% | – | 25.3% | 28.0% | – | 30 | 30 |
| Serious housing code violations (per 1,000 privately owned rental units) | – | 15.4 | 13.9 | 15.5 | 14.2 | – | 48 |
| • Severe crowding rate (% of renter households) | – | – | 4.4% | 2.7% | – | – | 39 |
| Sales volume | 271 | 741 | 536 | 458 | 401 | 41 | 39 |
| Index of housing price appreciation, all property types | 100.0 | 211.7 | 207.3 | 260.6 | 303.4 | – | 11 |
| Median sales price per unit, condominium[5] | $962,495 | $1,868,647 | $1,890,704 | $2,127,776 | $2,134,163 | 1 | 1 |
| • Median rent burden | – | 25.8% | 25.6% | 24.9% | – | – | 55 |
| • Severely rent-burdened households | – | 20.2% | 21.5% | 20.2% | – | – | 54 |
| • Severely rent-burdened households, low income | – | 62.1% | 58.5% | 65.9% | – | – | 1 |
| Housing choice vouchers (% of occupied, privately owned rental units) | – | – | 1.0% | 0.9% | – | – | 51 |
| Home purchase loan rate (per 1,000 properties) | – | 67.2 | 26.3 | 31.1 | – | – | 5 |
| Refinance loan rate (per 1,000 properties) | – | 17.5 | 35.1 | 33.9 | – | – | 4 |
| FHA/VA-backed home purchase loans (% of home purchase loans) | – | 0.0% | 0.3% | 0.0% | – | – | 51 |
| Pre-foreclosure notice rate (per 1,000 1-4 family and condo properties) | – | – | – | 21.8 | 9.8 | – | 55 |
| Notices of foreclosure rate (per 1,000 1-4 family and condo properties) | 1.1 | 0.8 | 2.4 | 2.2 | 2.0 | 57 | 57 |
| Tax delinquencies ≥ 1 year (% of residential properties) | – | 0.9% | 0.9% | 1.4% | – | – | 40 |

| Population | 2000 | 2007 | 2010 | 2013 | 2014 | 2000 Rank | 2013–14 Rank |
|---|---|---|---|---|---|---|---|
| • Households with children under 18 years old | 11.4% | – | 12.7% | 15.1% | – | 53 | 53 |
| • Population age 65 and older | 10.5% | – | 11.2% | 10.3% | – | 32 | 40 |
| • Foreign-born population | 23.3% | 23.9% | 23.7% | 23.8% | – | 43 | 45 |
| Population living in racially integrated tracts | 10.5% | – | 26.5% | – | – | 36 | 21 |
| • Median household income | $101,593 | $115,545 | $108,892 | $121,178 | – | 2 | 1 |
| • Poverty rate | 9.9% | 9.7% | 9.1% | 7.5% | – | 49 | 53 |
| • Unemployment rate | 5.8% | 4.3% | 5.7% | 4.5% | – | 46 | 55 |
| • Car-free commute (% of commuters) | 85.9% | 84.8% | 88.6% | 88.4% | – | 3 | 7 |
| • Mean travel time to work (minutes) | 24.4 | 24.9 | 24.1 | 24.5 | – | 55 | 55 |
| Serious crime rate (per 1,000 residents) | 40.8 | 29.0 | 23.2 | 25.2 | 23.0 | 4 | 4 |
| Students performing at grade level in English language arts | – | – | – | 54.0% | 55.5% | – | 2 |
| Students performing at grade level in math | – | – | – | 60.2% | 65.5% | – | 2 |

## Household Income Distribution (2014$)

2000   2011–13



## Racial and Ethnic Composition

2000   2011–13

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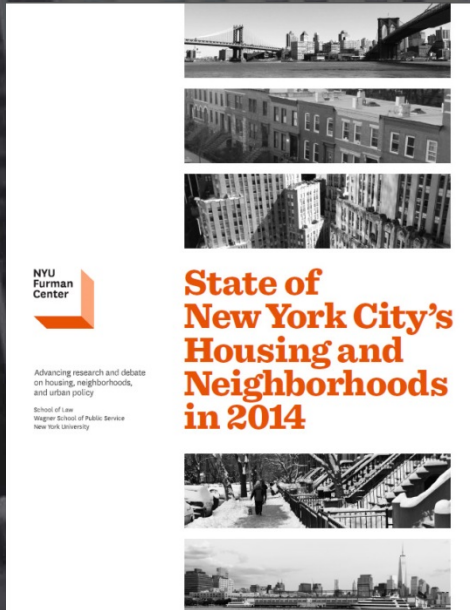
# 1. Focus on Density

# 2. City-Wide Analysis

1. Land Use & the Built Environment
2. Homeowners & Their Homes
3. Renters & Their Homes
4. Residents
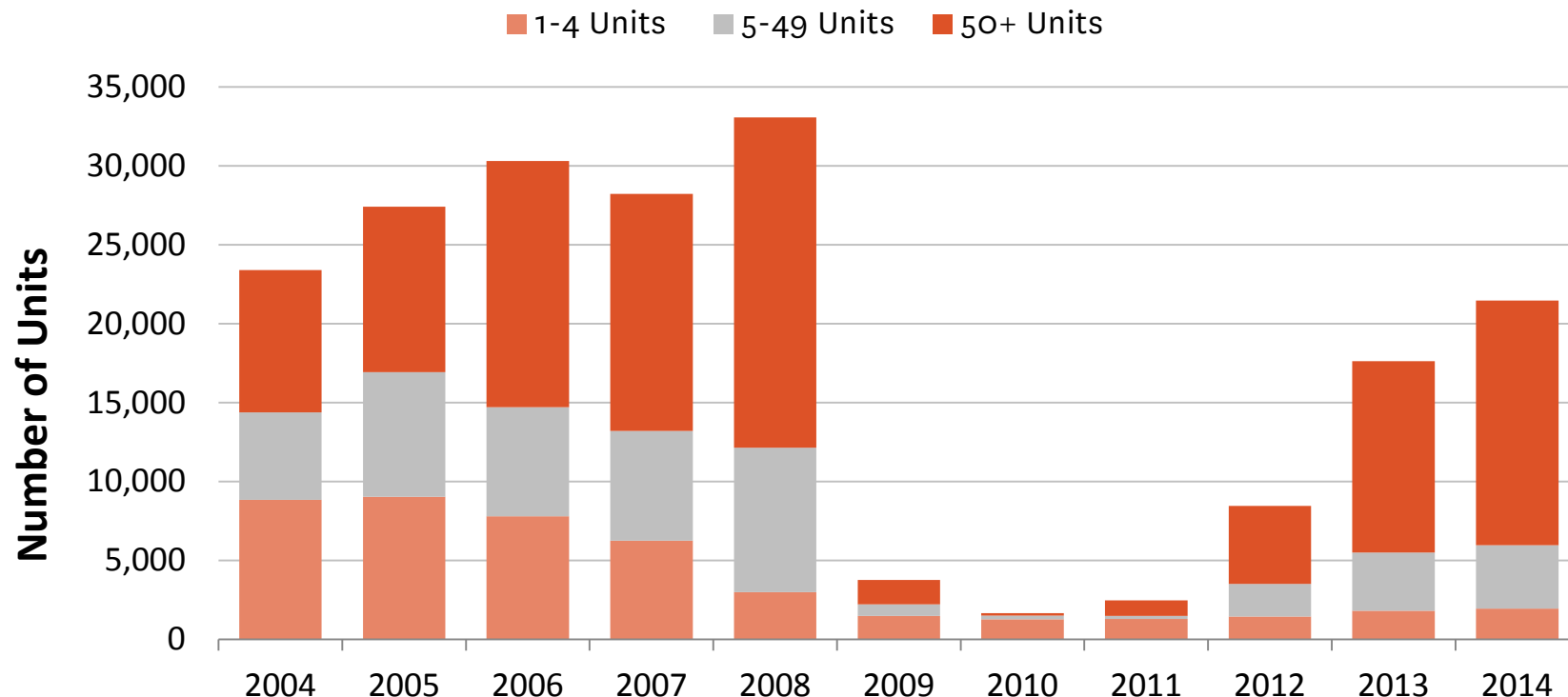5. Neighborhood Housing & Conditions

# 3. City, Borough, and Community District Data

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# Building permits rebounded in 2014, but are still below the 2008 peak.

## Residential Units Authorized by New Building Permits, by Property Size

■ 1-4 Units　　■ 5-49 Units　　■ 50+ Units



*Sources: NYC Department of Buildings, NYU Furman Center*

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# In 2014, permitting activity was concentrated in Manhattan, parts of Brooklyn, and Long Island City.

· 1-5 Units
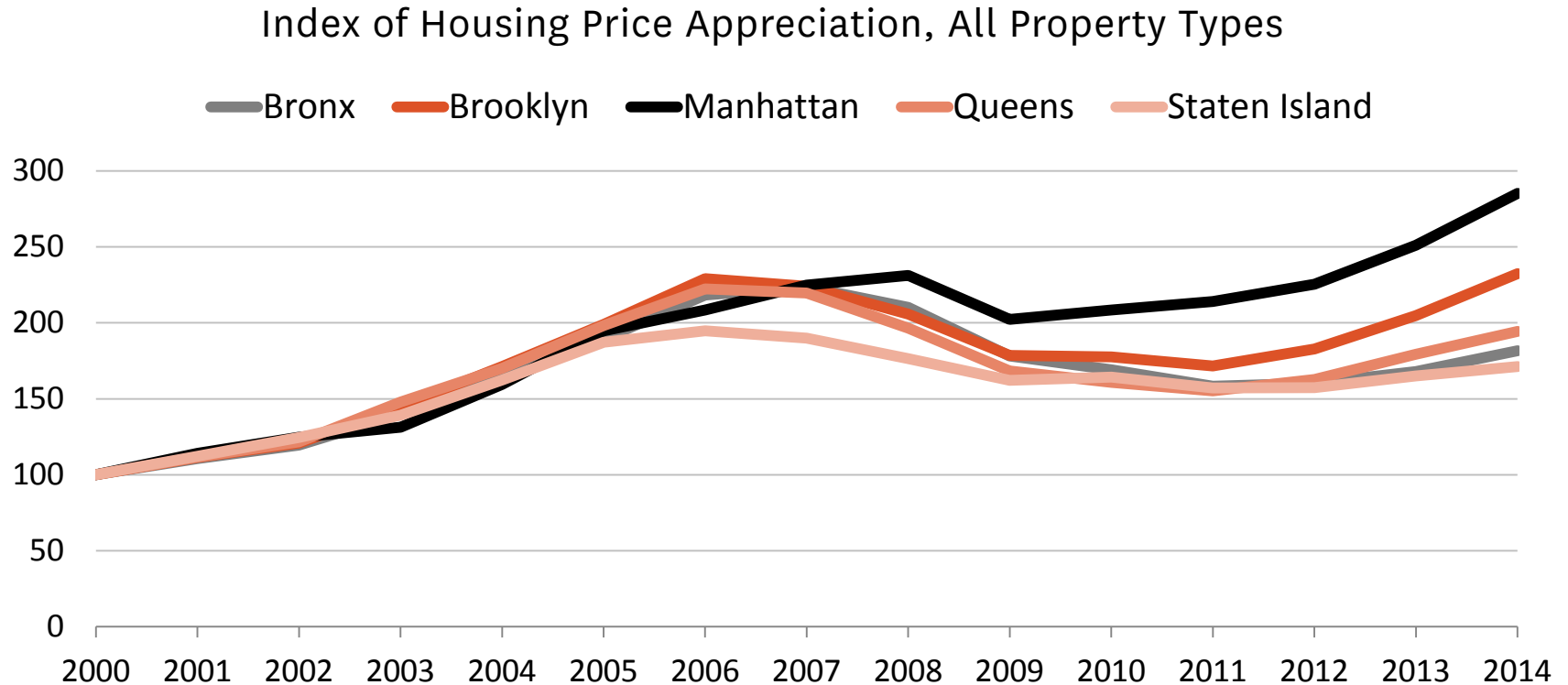
● 6-50 Units

● 51-100 Units

● Greater than 100 Units
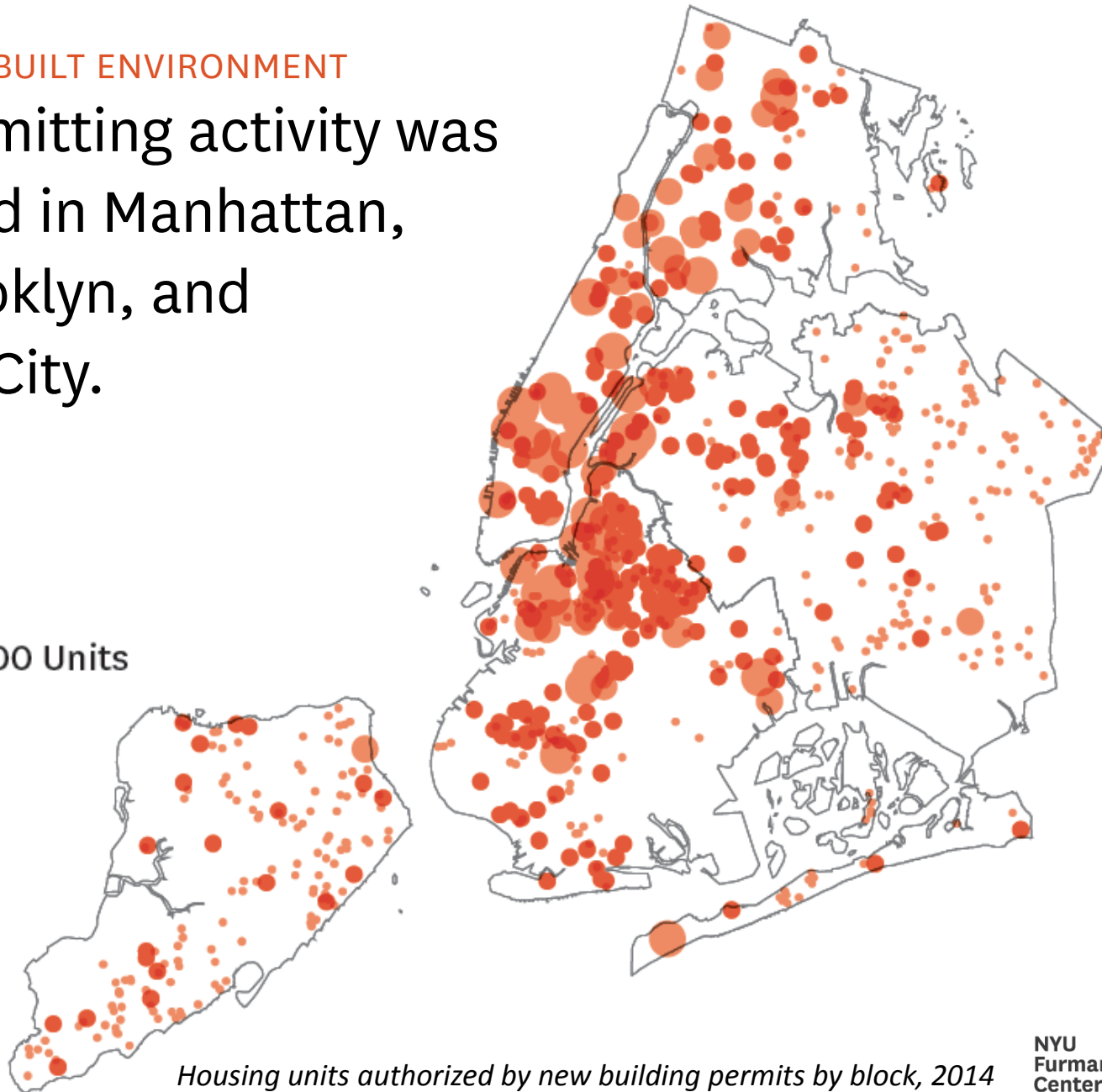
*Housing units authorized by new building permits by block, 2014*
*Sources: NYC Department of Buildings, NYU Furman Center*

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# In 2014, home prices increased in all five boroughs.

### Index of Housing Price Appreciation, All Property Types



*Index of housing price appreciation for all residential property types (except cooperatives) by borough (index = 100 in 2000)*

*Sources: NYC Department of Finance, NYU Furman Center*

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# Foreclosure indicators signaled less mortgage-related distress in 2014 than in 2013.

## Number of Foreclosure Filings by Property Type

■ 1 Unit  ■ 2-4 Units  ■ Condominiums
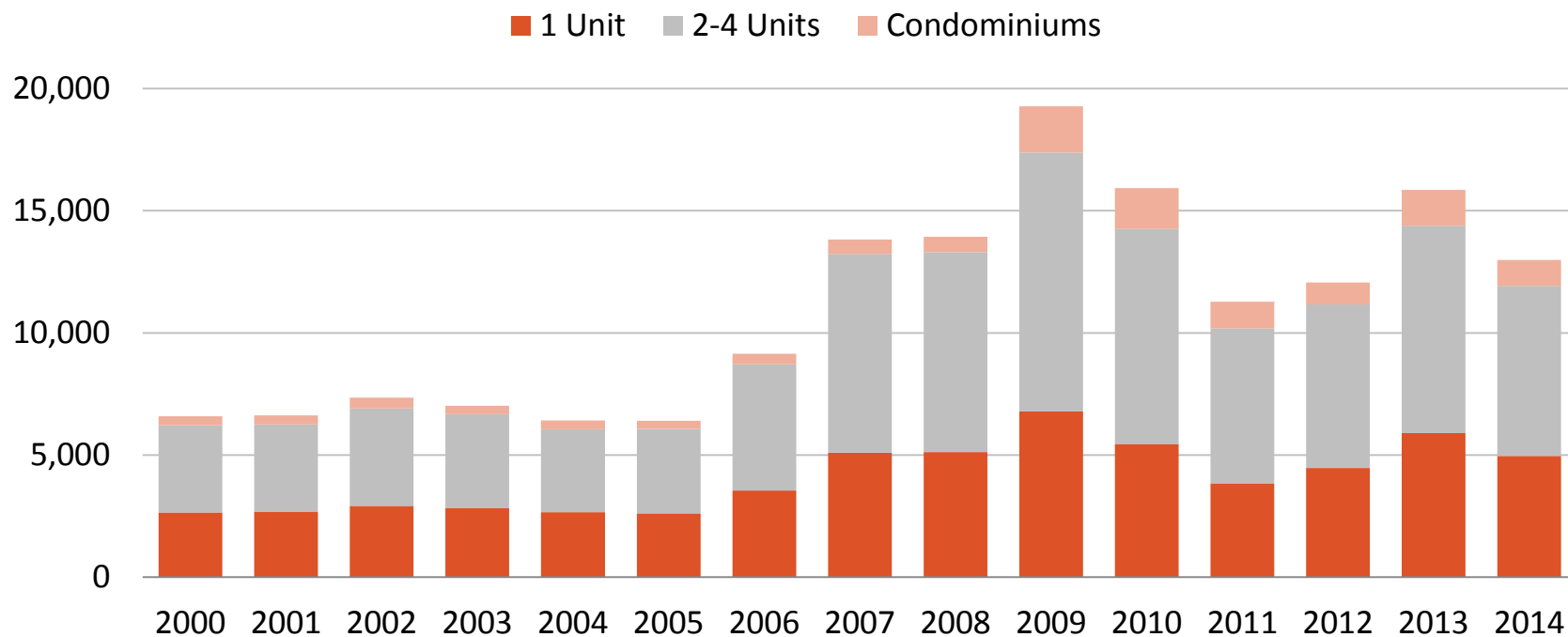


*Number of foreclosure filings by property type, New York City*

*Sources: Public Data Corporation, NYC Department of Finance, NYU Furman Center*

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# Rent levels have increased faster than income.

Index of Median Gross Rent & Median Renter Household Income (2014$)
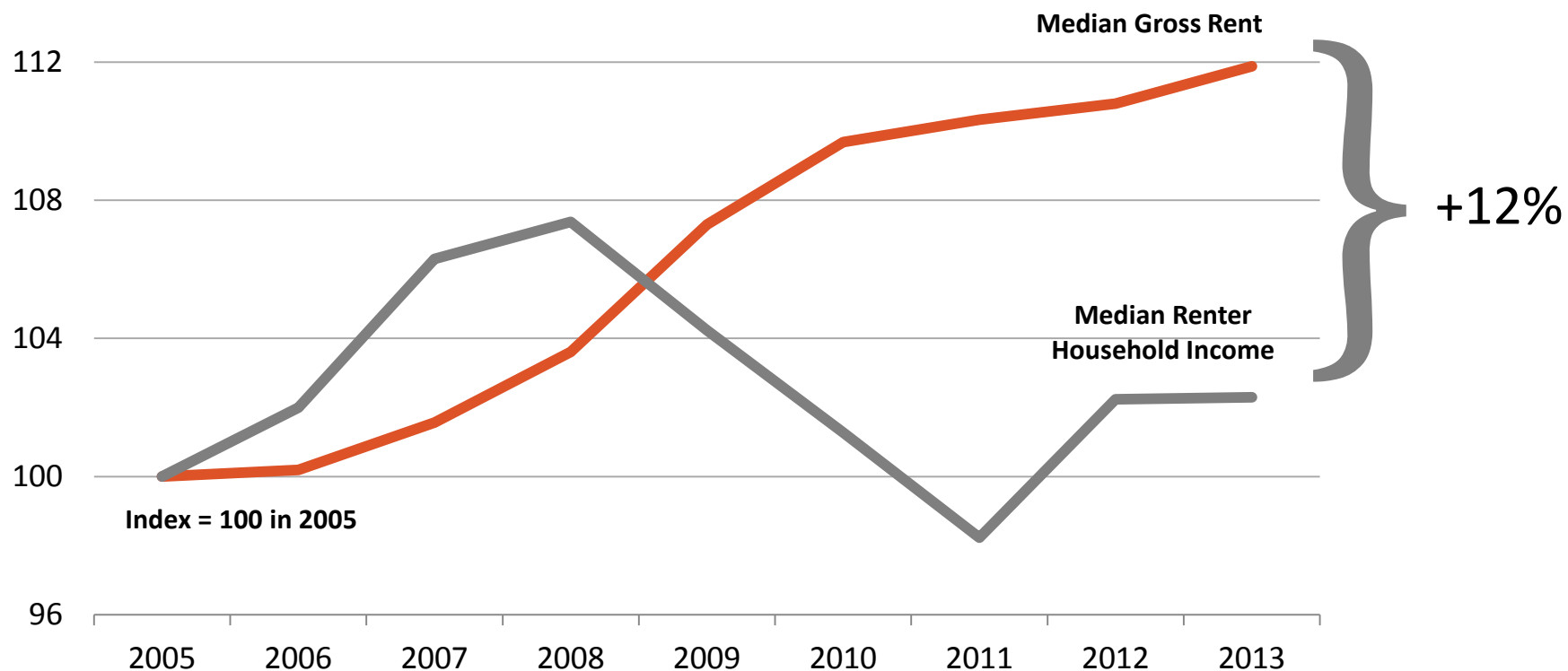


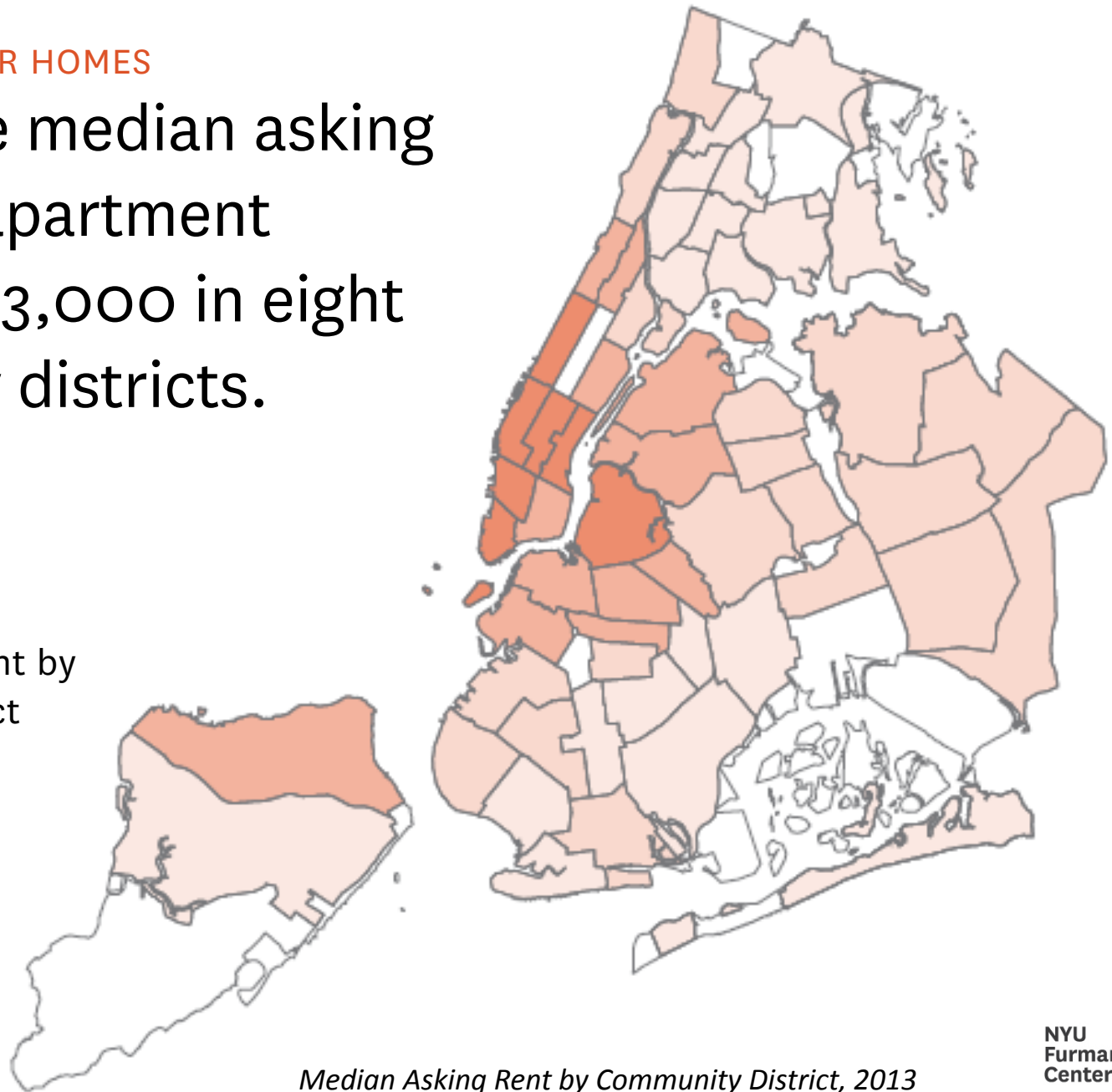*Index of median gross rent and median renter household income (2014$), New York City*
*Sources: American Community Survey , NYU Furman Center*

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# In 2013, the median asking rent of an apartment exceeded $3,000 in eight community districts.

Median Asking Rent by Community District

| | |
|---|---|
| | $1,500 or Less |
| | $1,501–$2,000 |
| | $2,501–$3,000 |
| | More Than $3,000 |
| | No Data |

*Median Asking Rent by Community District, 2013*
*Sources: StreetEasy, NYU Furman Center*

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# Adults made up a growing share of the city's population; the share under 18 declined.
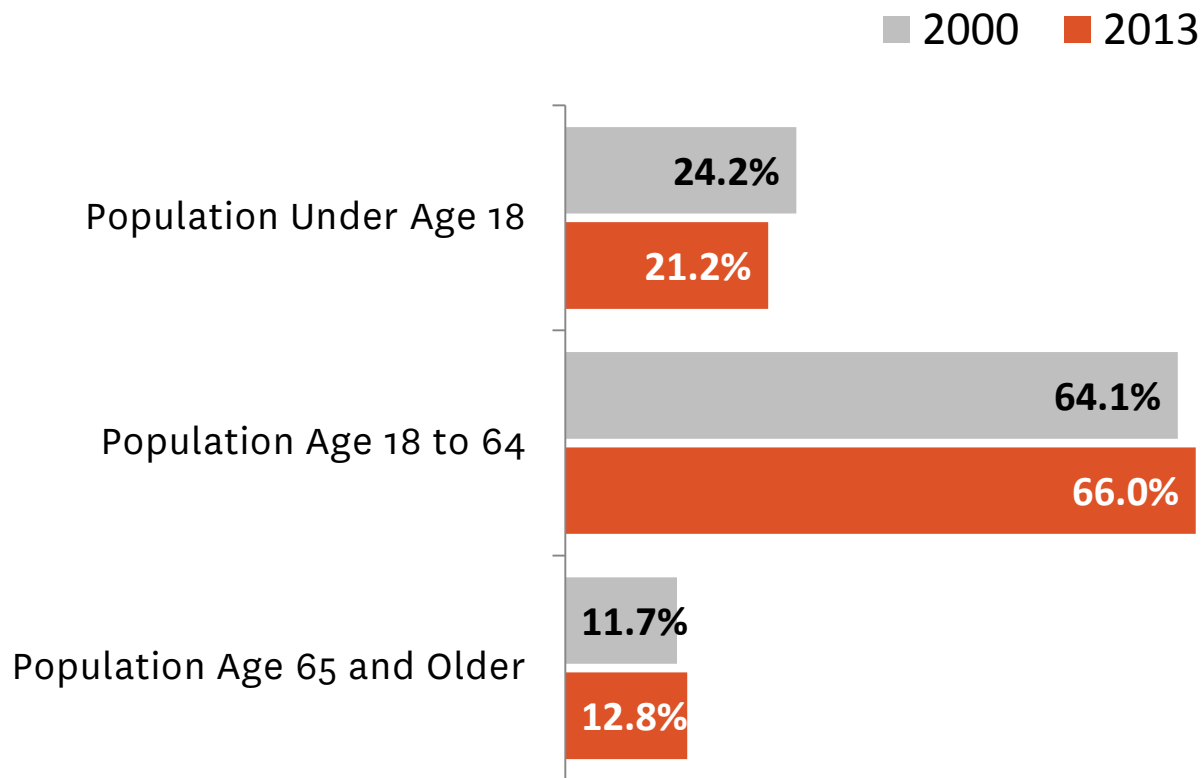


**2000** **2013**

Population Under Age 18 — 24.2% (2000), 21.2% (2013)

Population Age 18 to 64 — 64.1% (2000), 66.0% (2013)
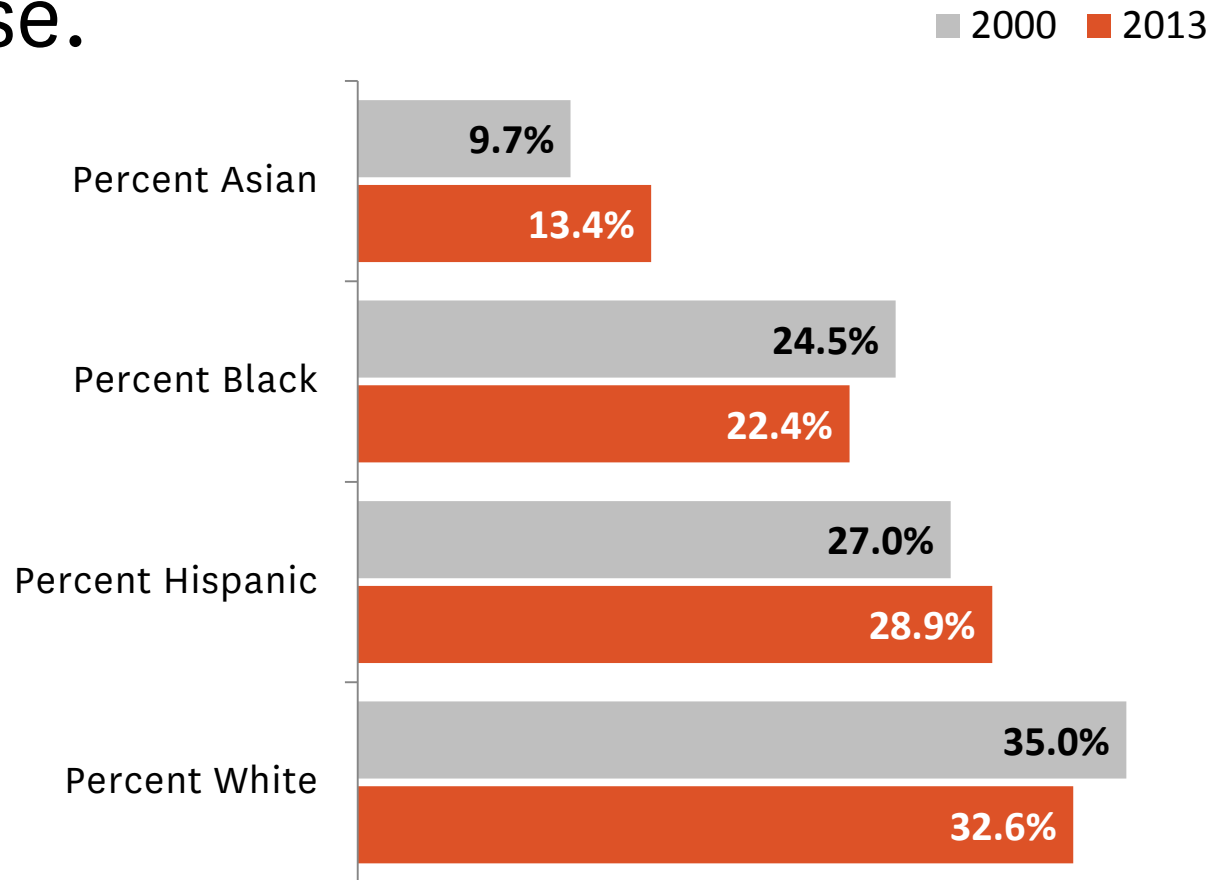
Population Age 65 and Older — 11.7% (2000), 12.8% (2013)

*Demographic Characteristics of New Yorkers*
*Sources: U.S. Census (2000), American Community Survey (2013), NYU Furman Center*

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# New York City's population became more diverse.

**2000** **2013**

Percent Asian
- 9.7% (2000)
- 13.4% (2013)

Percent Black
- 24.5% (2000)
- 22.4% (2013)

Percent Hispanic
- 27.0% (2000)
- 28.9% (2013)

Percent White
- 35.0% (2000)
- 32.6% (2013)

*Demographic Characteristics of New Yorkers*

*Sources: U.S. Census (2000), American Community Survey (2013), NYU Furman Center*

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# The citywide high school graduation rate increased between 2012 and 2014, though disparities between boroughs persist.



Four-Year High School Graduation Rates
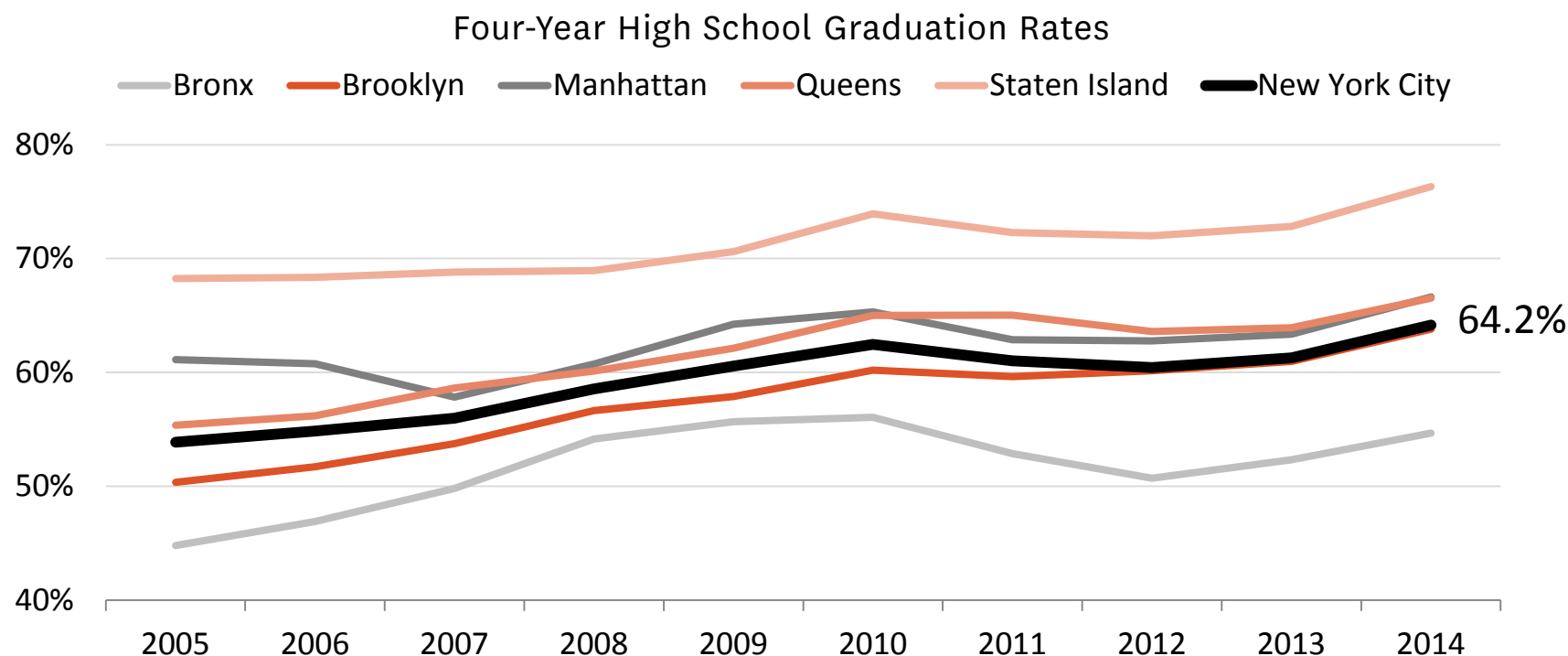
Four-year high school graduation rates (measured in June), by borough
Sources: New York City Department of Education, NYU Furman Center

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# Following a rapid decline over the past two decades, the city's serious crime rate remained steady between 2013 and 2014.

**Serious Crime Rate per 1,000 Residents**

— Serious Crime — Serious Property Crime — Serious Violent Crime
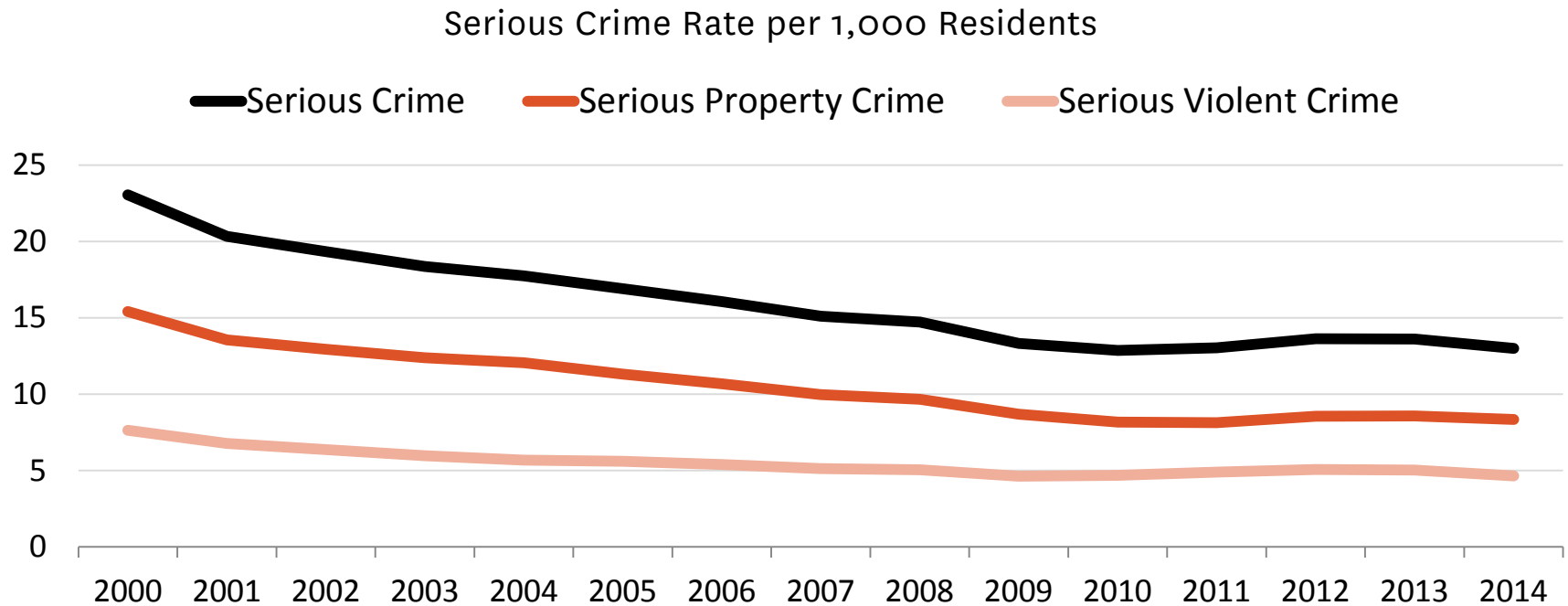
*Serious crime rate (per 1,000 residents) by major type, New York City*
*Sources: New York City Police Department, NYU Furman Center*

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# More New Yorkers were commuting without a car.



Means of Traveling to Work — 2000, 2013

| | Public Transit | Bike | Walk | Car | Car Free (Transit + Walk + Bike) |
|---|---|---|---|---|---|
| 2000 | 52.6% | 0.5% | 10.7% | 33.9% | 63.8% |
| 2013 | 59.1% | 1.3% | 10.5% | 27.4% | 70.9% |
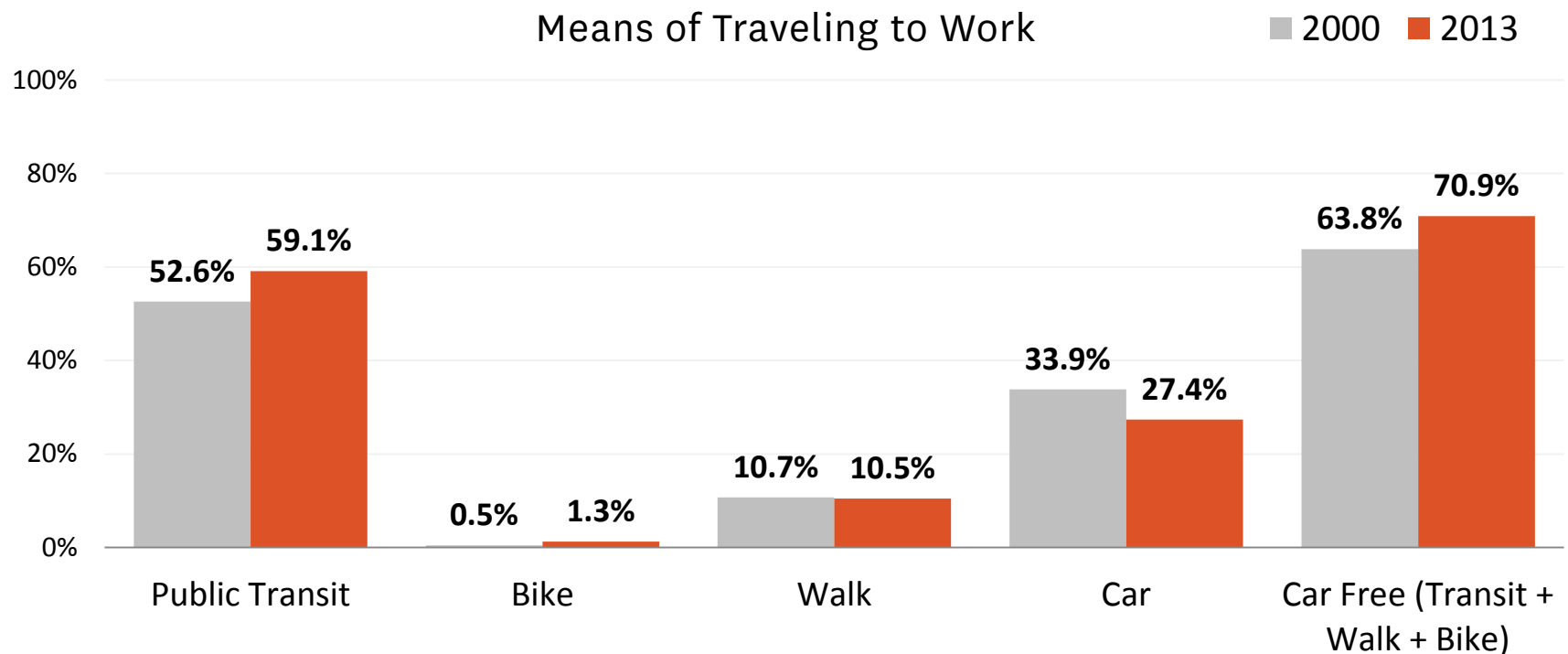
*Means of traveling to work (share of workers who do not work at home), New York City*
*Sources: U.S. Census (2000), American Community Survey (2013), NYU Furman Center*

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# Among U.S. cities, New York City is in a class of its own when it comes to density.

# Density levels far higher in New York City than in other cities.

Median Neighborhood Density Experienced by Residents of Large Central Cities, 2010
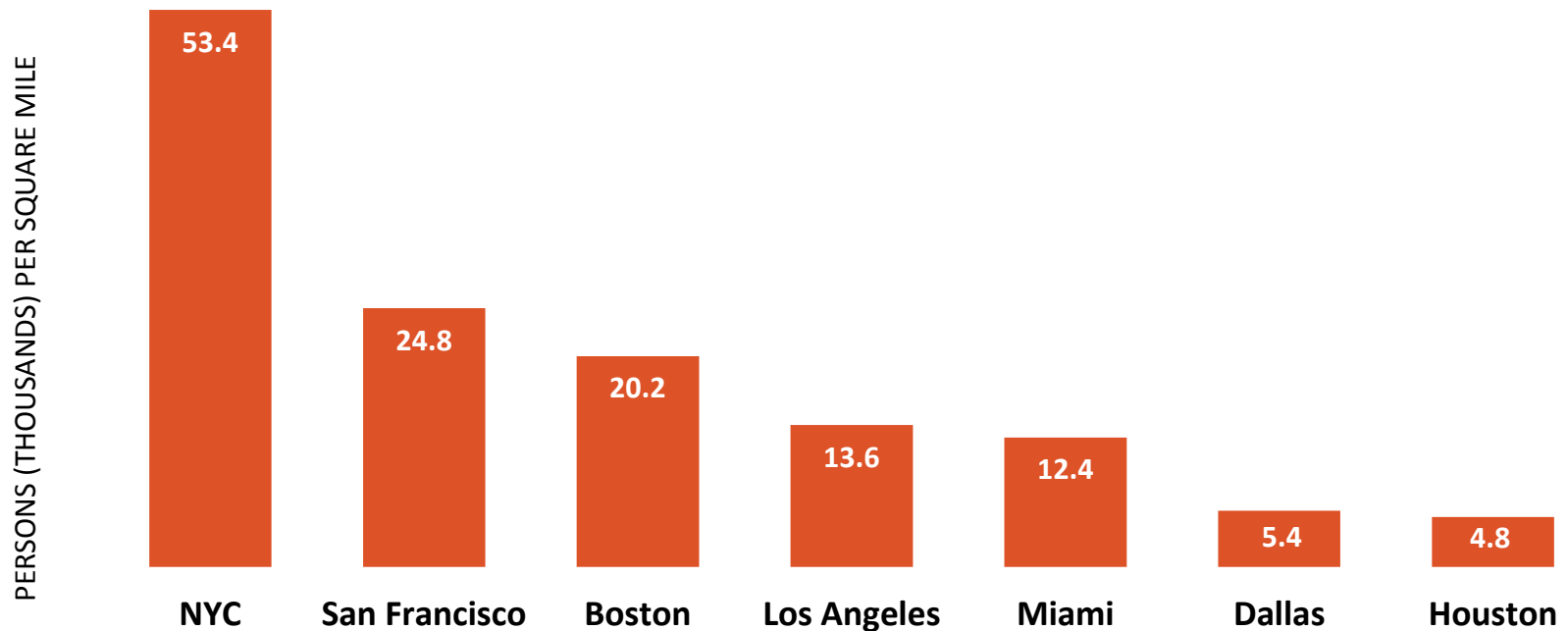


Median Neighborhood Density Experienced by Residents of Large Central Cities, 1970-2010
Sources: U.S. Census, Neighborhood Change Database, NYU Furman Center

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# Manhattan and the western edge of the South Bronx are the densest areas of the city.

Population Density (Thousands of Persons per Square Mile), 2010

- 15.0 or Less
- 15.1-30.0
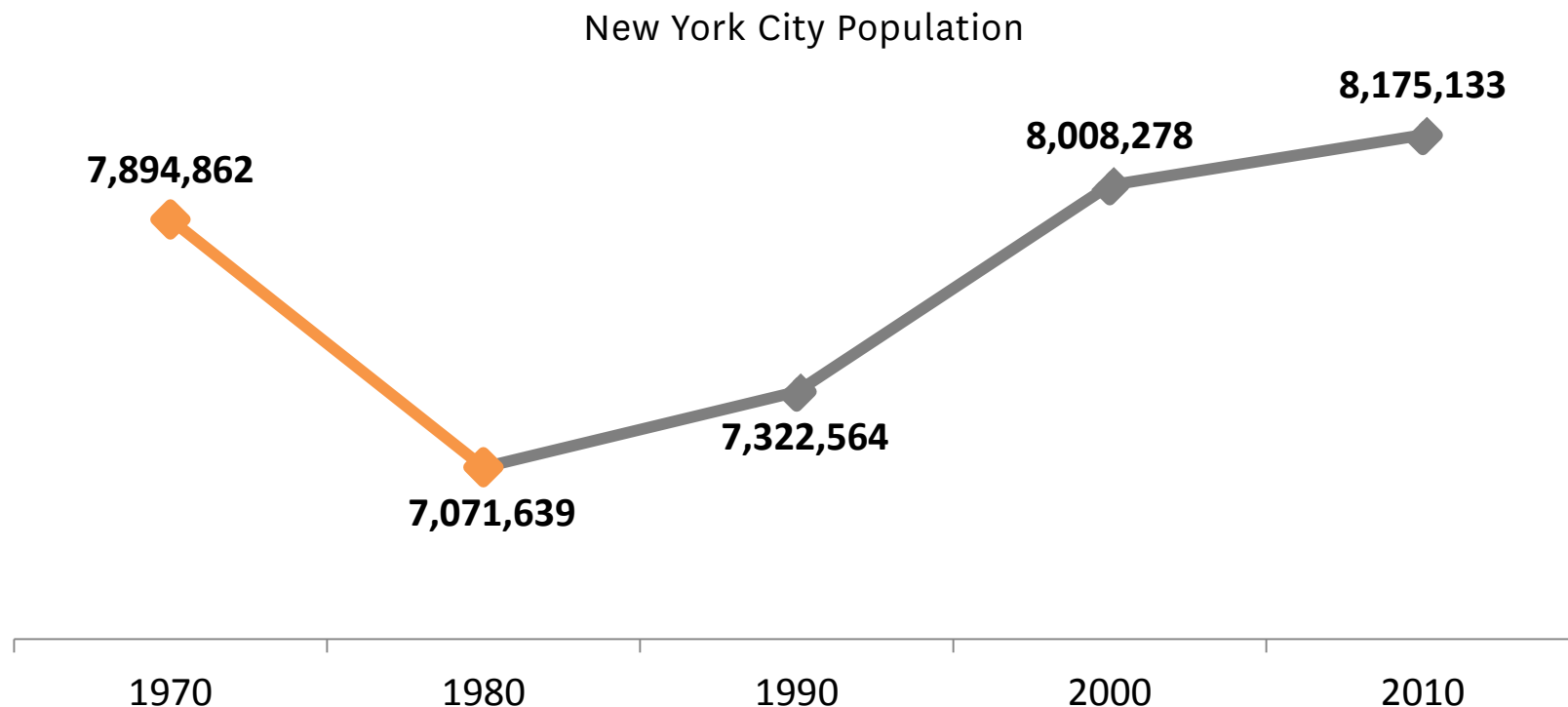- 30.1-45.0
- 45.1-60.0
- More Than 60.0



*Sources: U.S. Census, Neighborhood Change Database, NYU Furman Center*

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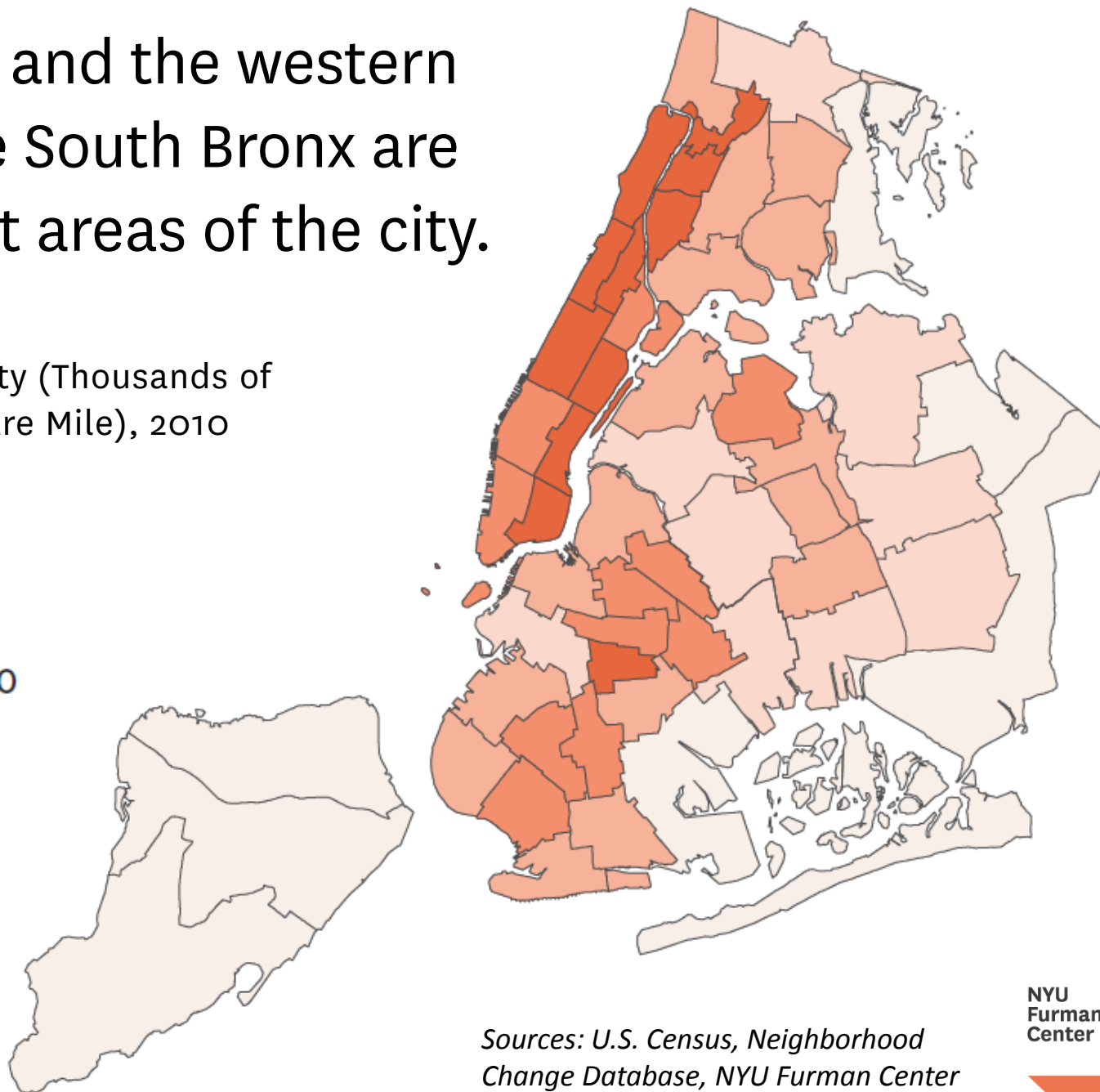
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# People in the city's densest neighborhoods live in larger apartments.

Square Footage of Residential
Space per Person, 2010
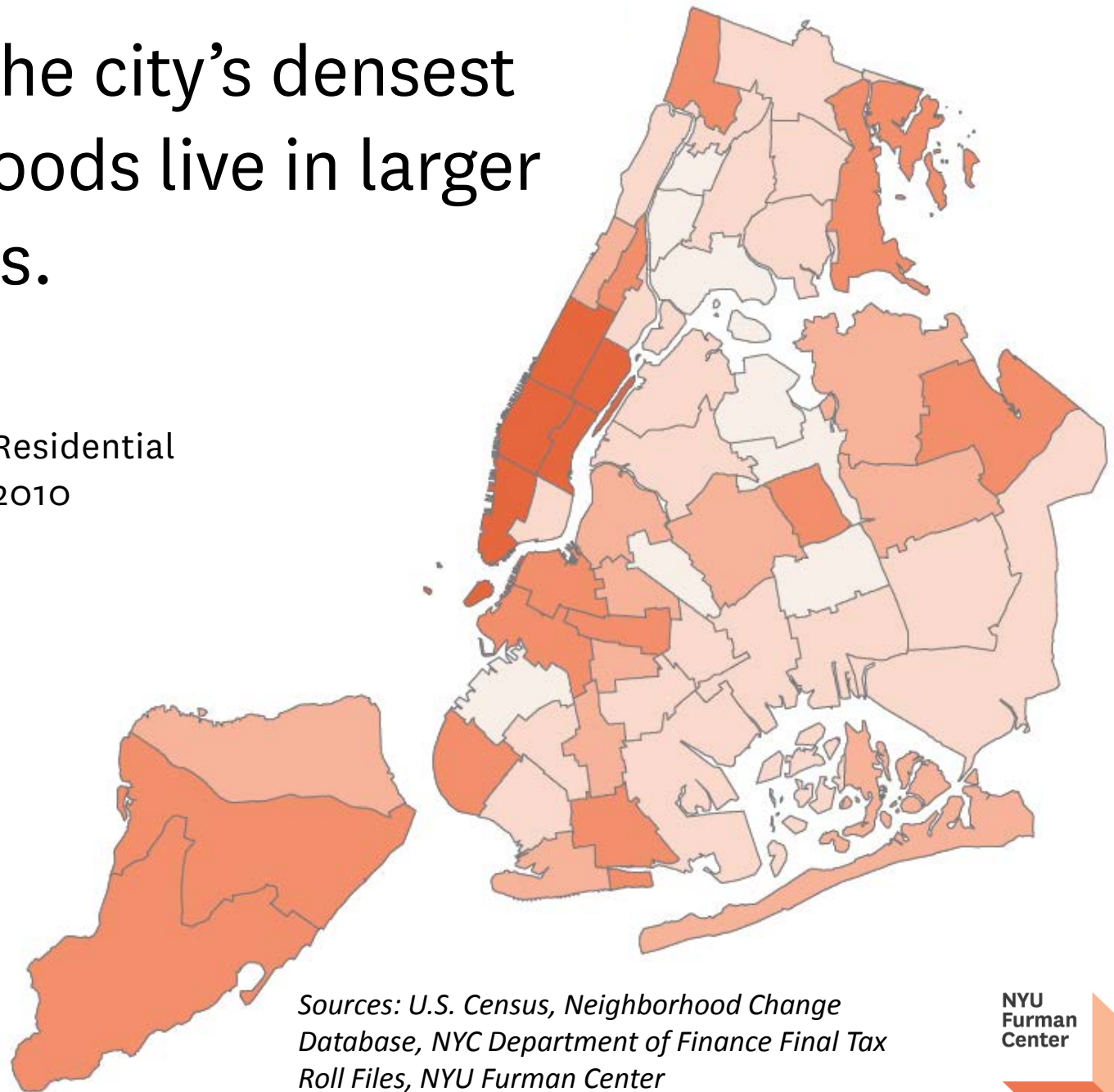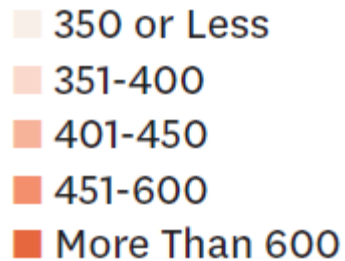
- 350 or Less
- 351-400
- 401-450
- 451-600
- More Than 600

*Sources: U.S. Census, Neighborhood Change Database, NYC Department of Finance Final Tax Roll Files, NYU Furman Center*

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# NYC lost almost a million people in the 1970s, but its population has grown since then.

New York City Population



*New York City Population 1970-2010*
*Sources: U.S. Census, Neighborhood Change Database, NYU Furman Center*

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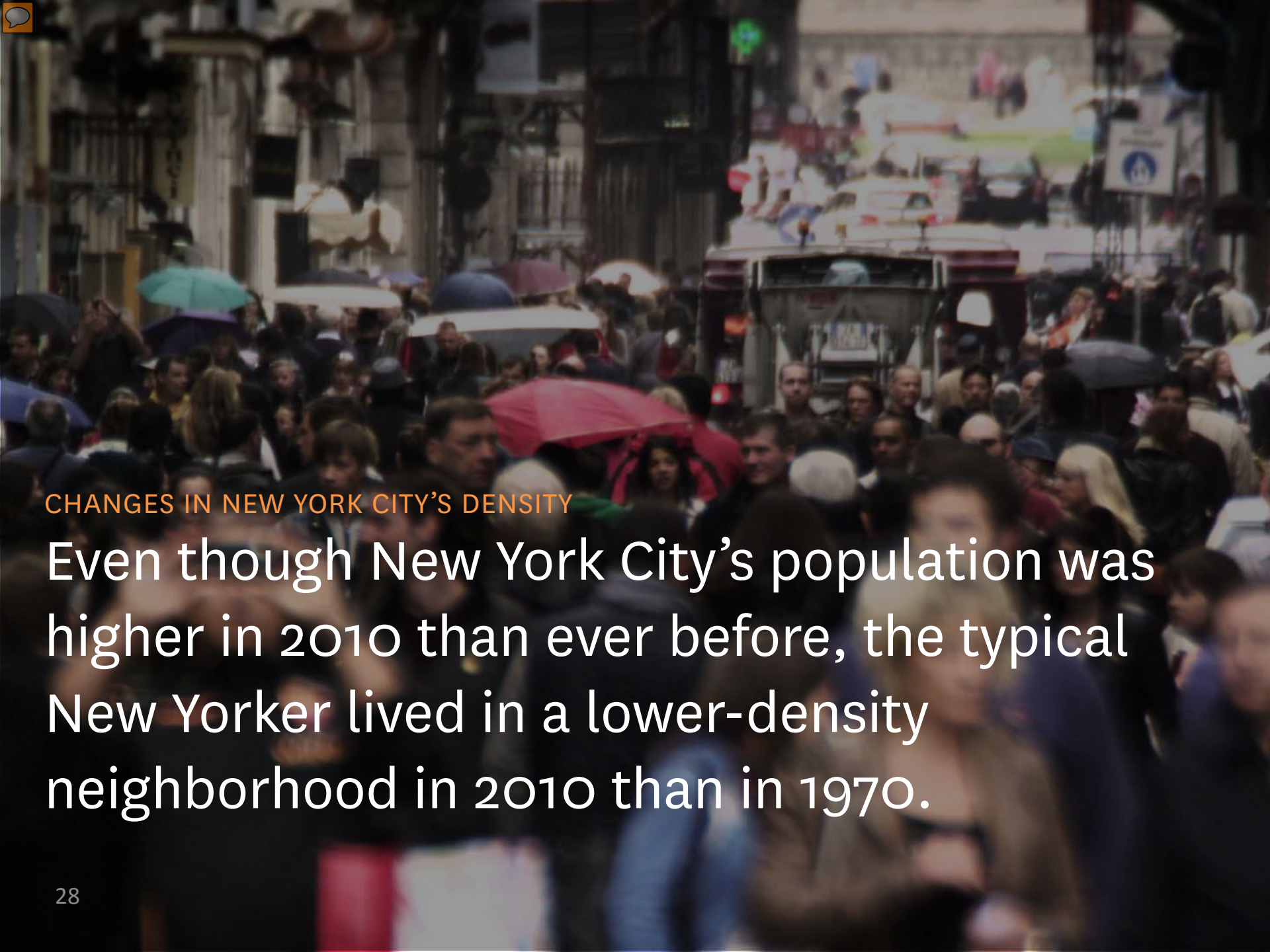NYU Furman Center

# NYC lost almost a million people in the 1970s, but its population has grown since then.

New York City Population



7,894,862

7,071,639

7,322,564

8,008,278

8,175,133

1970  1980  1990  2000  2010

*New York City Population 1970-2010*

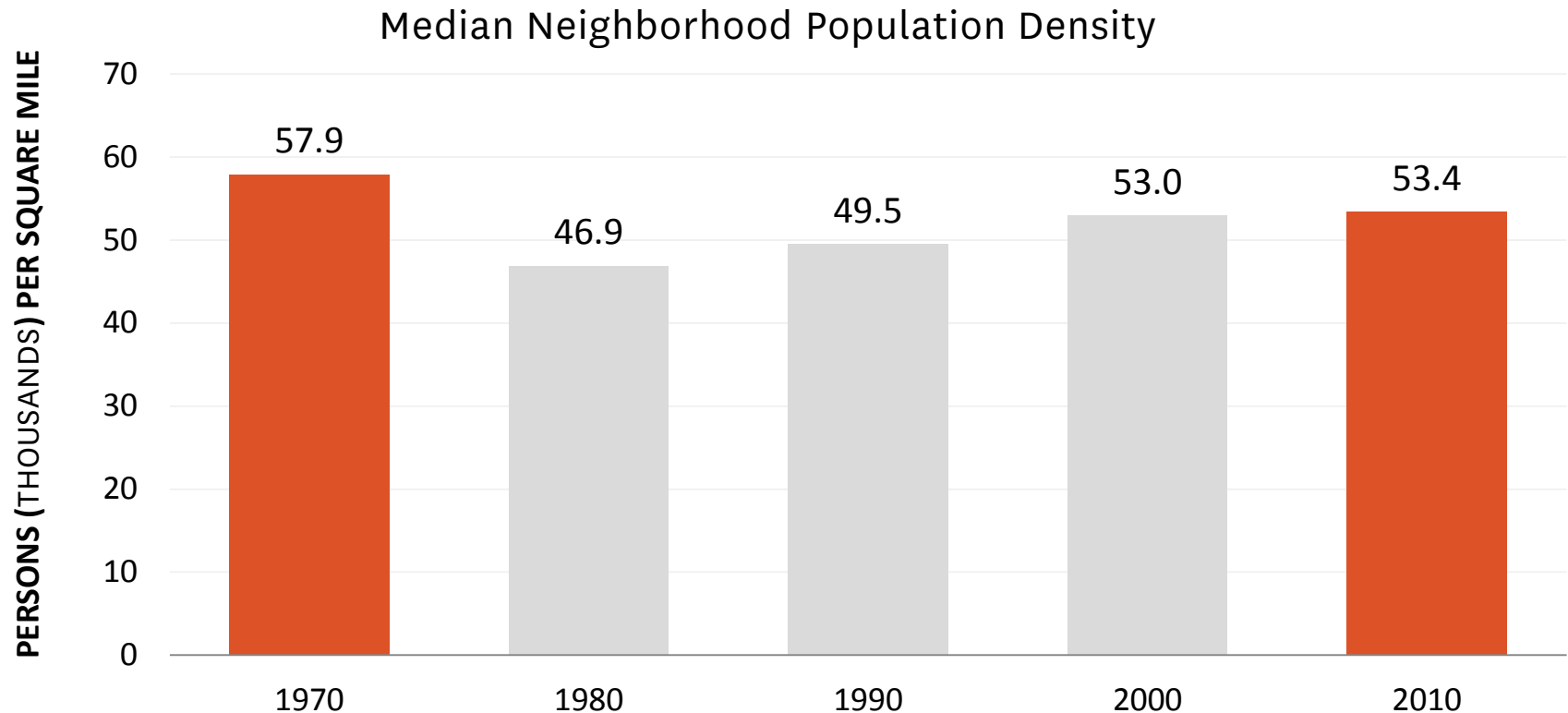*Sources: U.S. Census, Neighborhood Change Database, NYU Furman Center*

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Even though New York City's population was higher in 2010 than ever before, the typical New Yorker lived in a lower-density neighborhood in 2010 than in 1970.

# The typical New Yorker lived in a lower-density neighborhood in 2010 than in 1970.

## Median Neighborhood Population Density



*Median Neighborhood (Tract) Population Density Experienced by NYC Residents, 1970-2010*
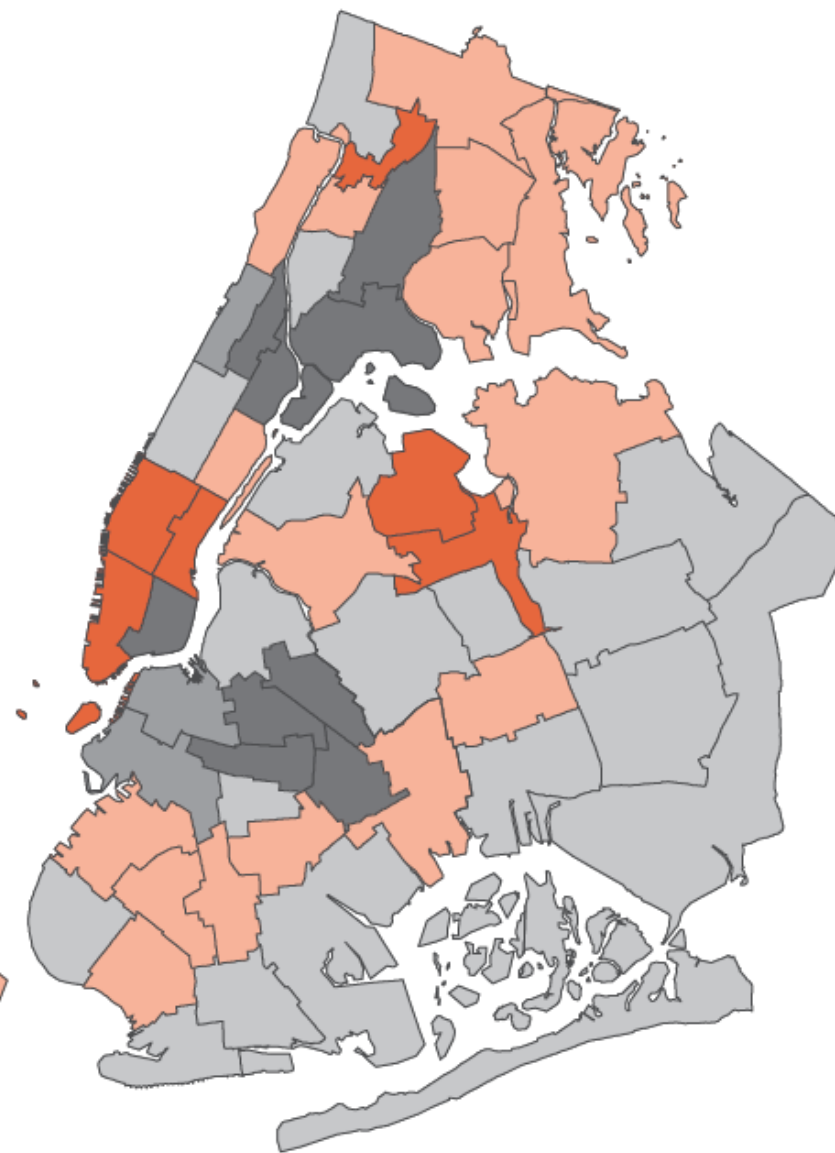*Sources: U.S. Census, Neighborhood Change Database, NYU Furman Center*
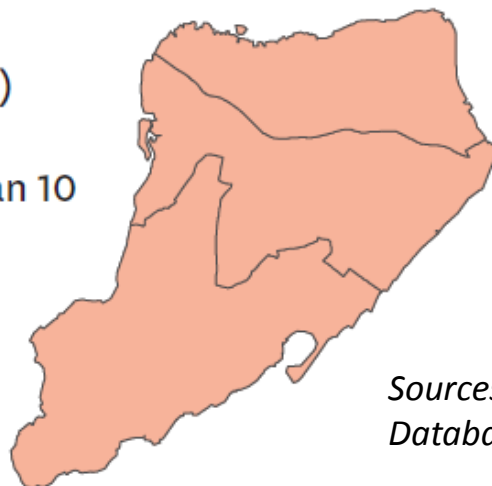
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CHANGES IN DENSITY

# New York City's population growth has been concentrated in lower-density areas.

Change in Population Density (Thousands of Persons per Square Mile), 1970-2010

Legend:
- Decreased 10 or More
- Decreased 2-9.9
- Little Change (+/- 2)
- Increased 2.1-10
- Increased More Than 10

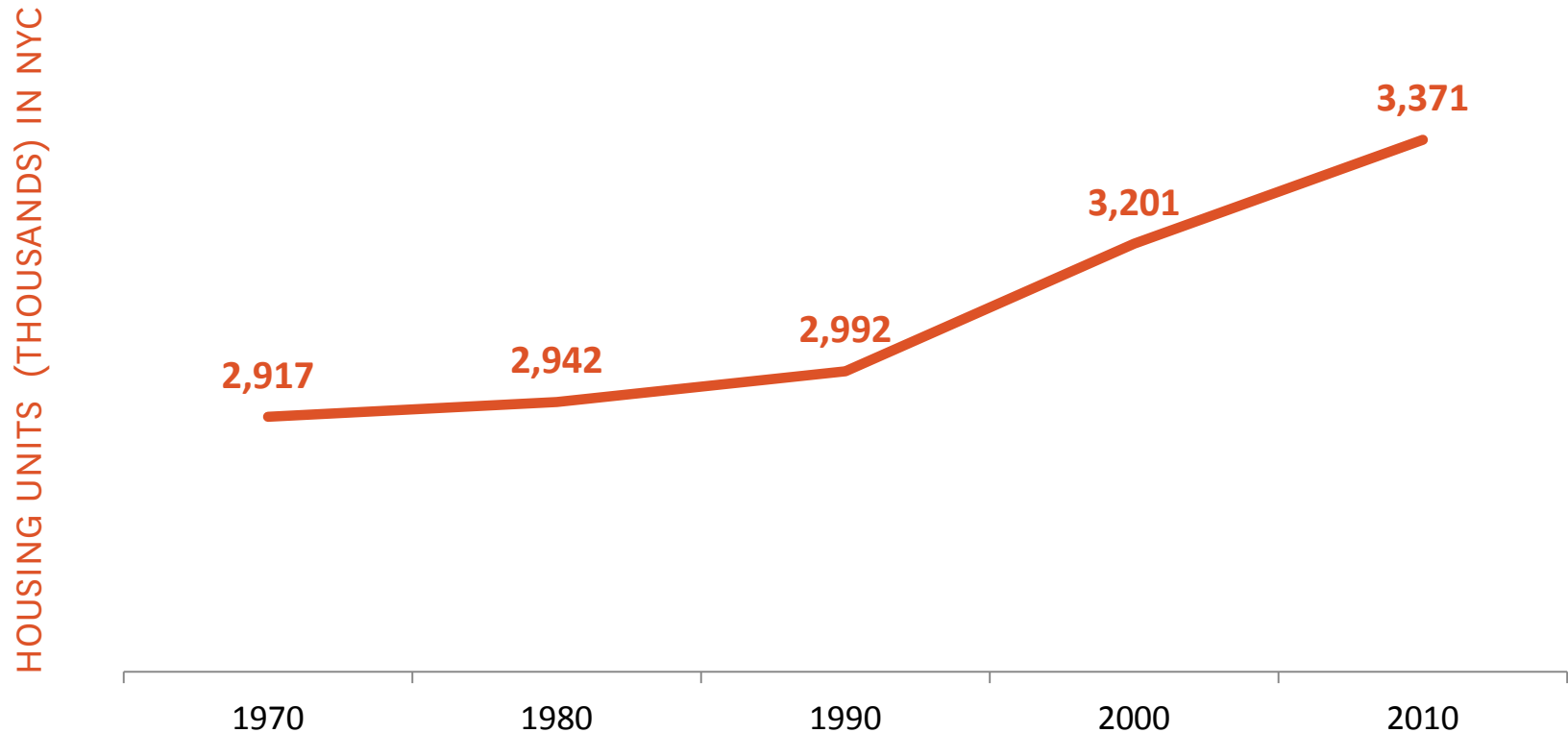*Sources: U.S. Census, Neighborhood Change Database, NYU Furman Center*

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There are two contributors to changes in population density: the number housing units and the number of people per unit.

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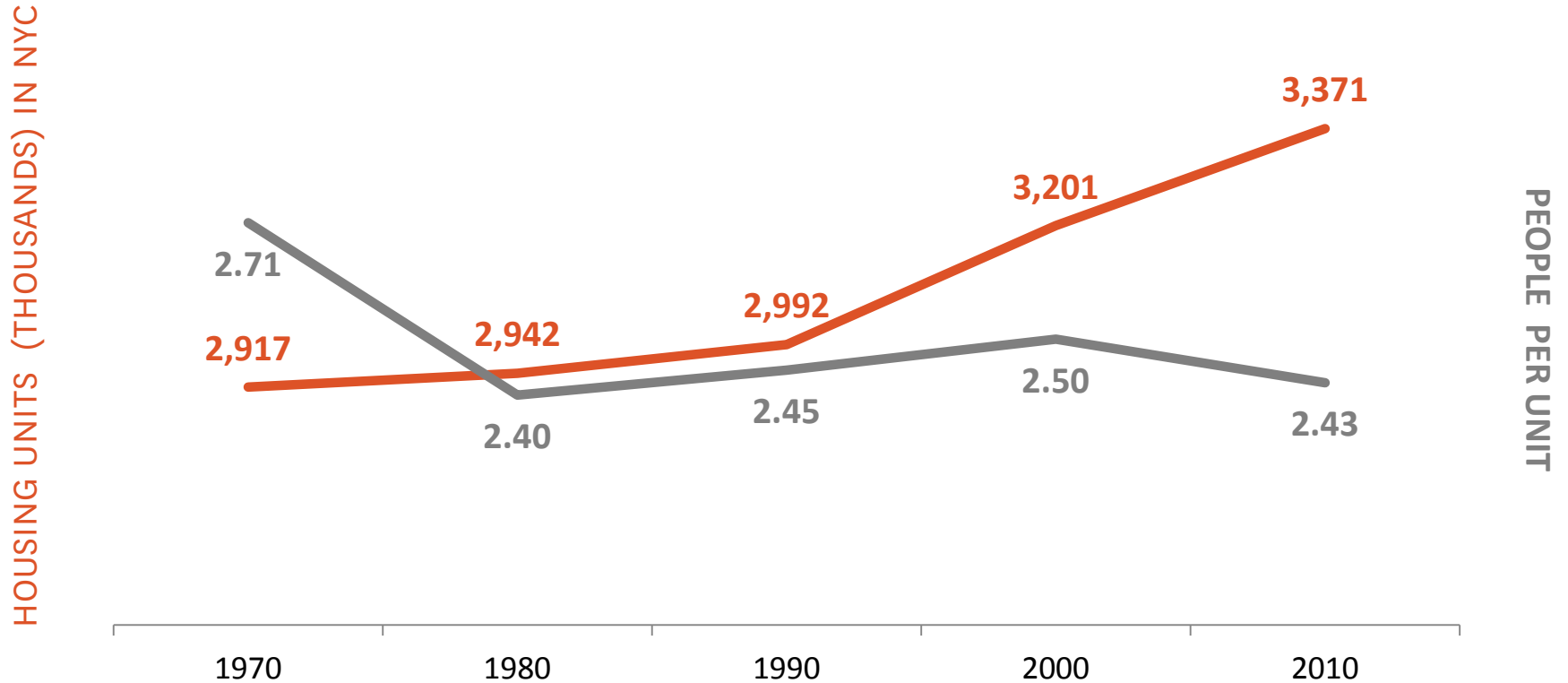# The addition of new housing and number of people per unit have both contributed to changes in the city's density.

HOUSING UNITS (THOUSANDS) IN NYC

2,917

2,942

2,992

3,201

3,371

1970   1980   1990   2000   2010

*Sources: U.S. Census, Neighborhood Change Database, NYC Department of Finance Final Tax Roll Files, NYU Furman Center*

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# The addition of new housing and number of people per unit have both contributed to changes in the city's density.

HOUSING UNITS (THOUSANDS) IN NYC

PEOPLE PER UNIT

3,371

3,201

2,992

2,942

2,917

2.71

2.40

2.45

2.50

2.43

1970    1980    1990    2000    2010

*Sources: U.S. Census, Neighborhood Change Database, NYC Department of Finance Final Tax Roll Files, NYU Furman Center*

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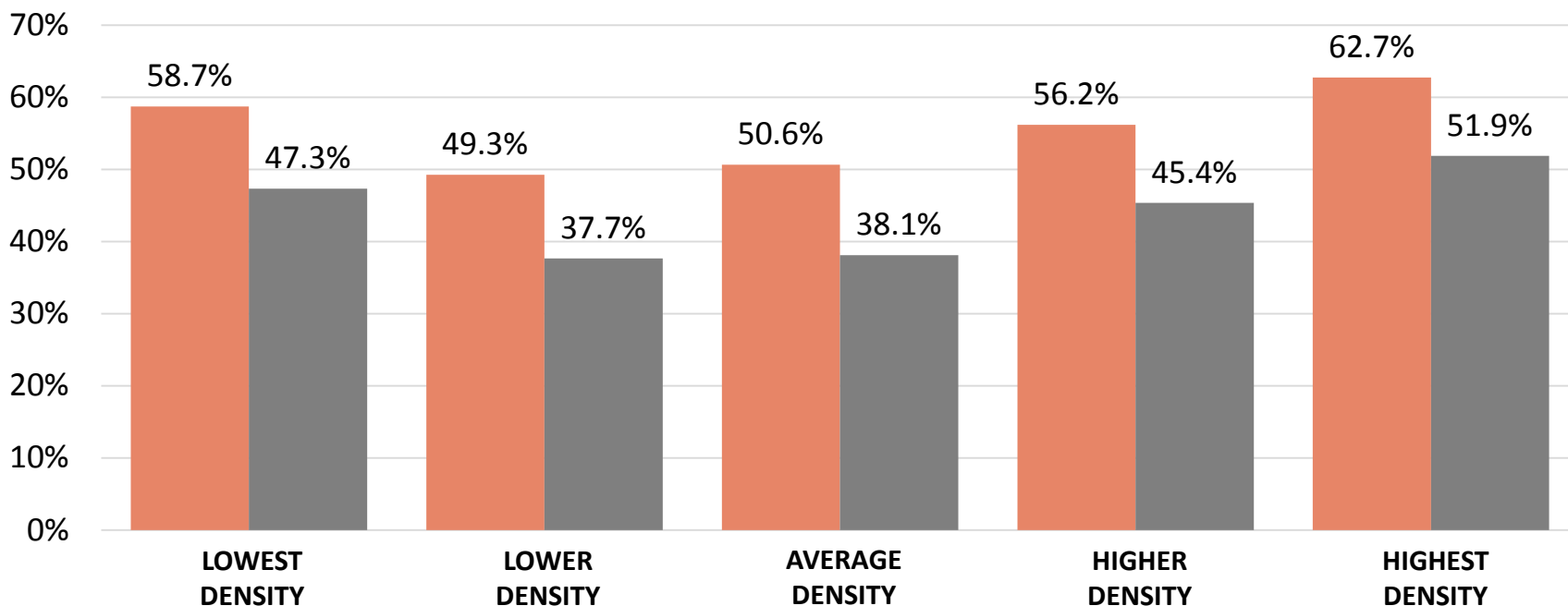
# Lower Manhattan and parts of Brooklyn and Queens saw the largest increases in housing units.

Change in Thousands of Housing Units per Square Mile of Land, 1970-2010

- ■ Decreased 1.0 or More
- ■ Little Change (Within 1)
- ■ Increased 1.1-2 .0
- ■ Increased 2.1-4.0
- ■ Increased More Than 4.0
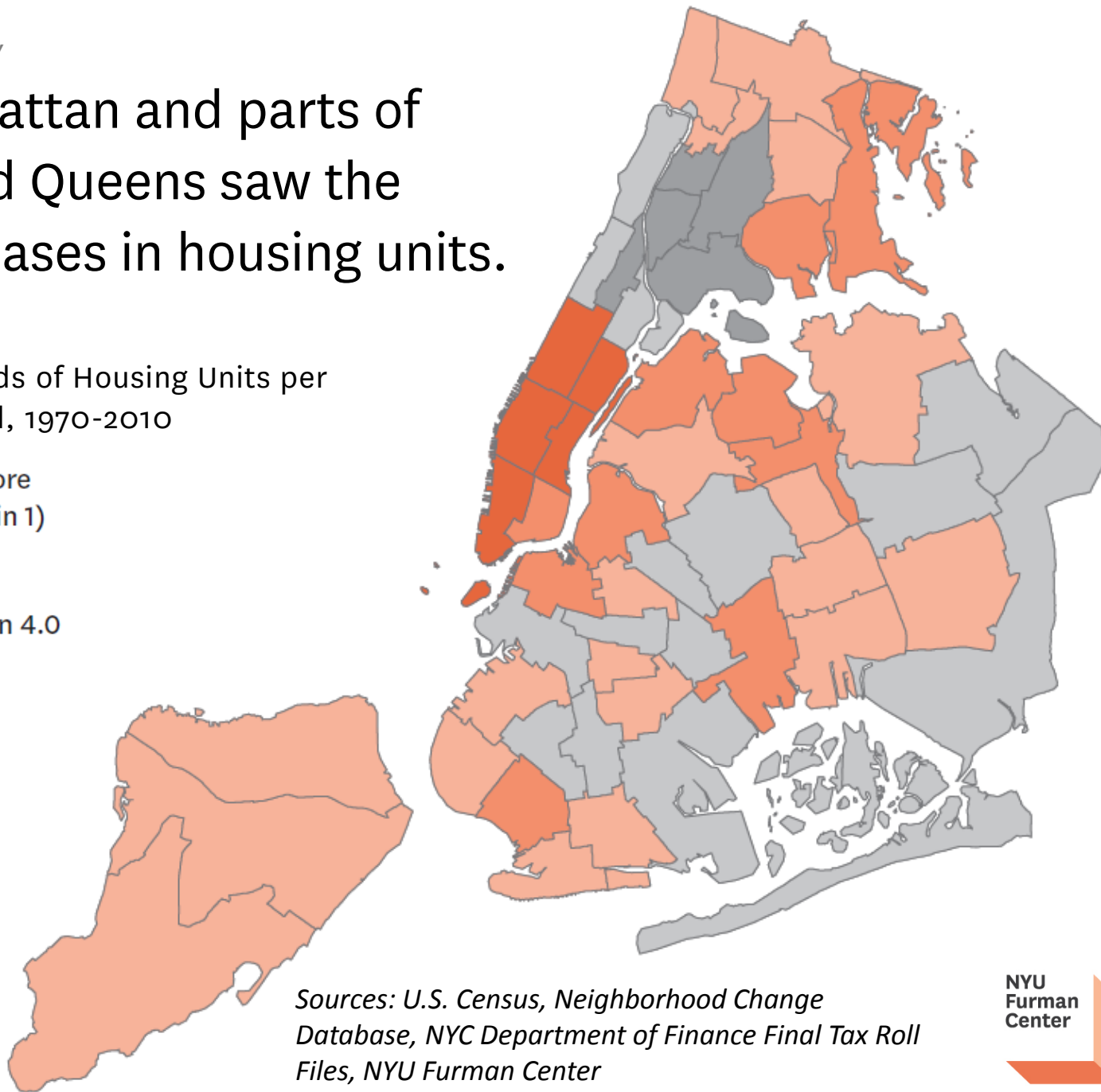
*Sources: U.S. Census, Neighborhood Change Database, NYC Department of Finance Final Tax Roll Files, NYU Furman Center*

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Population density is associated with certain positive neighborhood amenities, and largely unrelated to many negative attributes.

DENSITY AND QUALITY OF LIFE

# Measures of public safety do not strongly relate to density.

Serious Crime Rates per 1,000 Residents and Non-Resident Workers

Bar chart values:
- LOWEST DENSITY: 8.4
- LOWER DENSITY: 12.0
- AVERAGE DENSITY: 10.6
- HIGHER DENSITY: 11.4
- HIGHEST DENSITY: 10.5
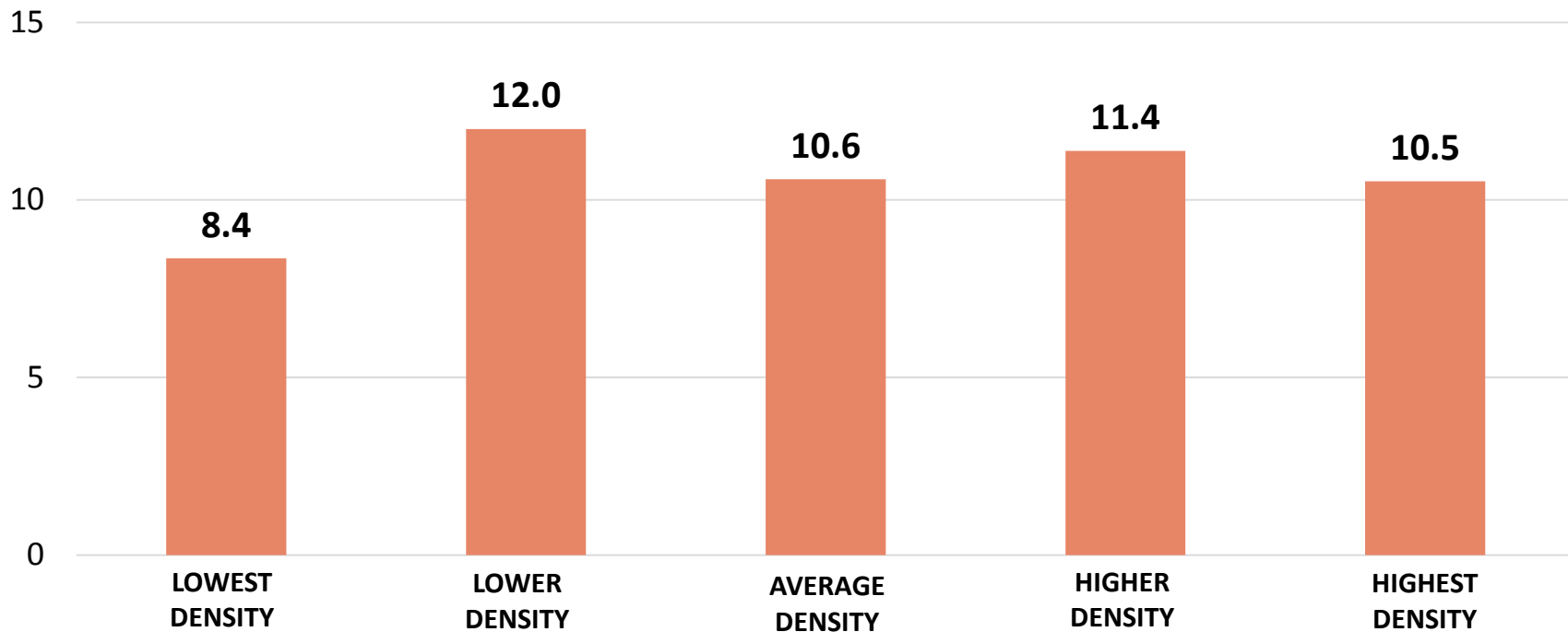
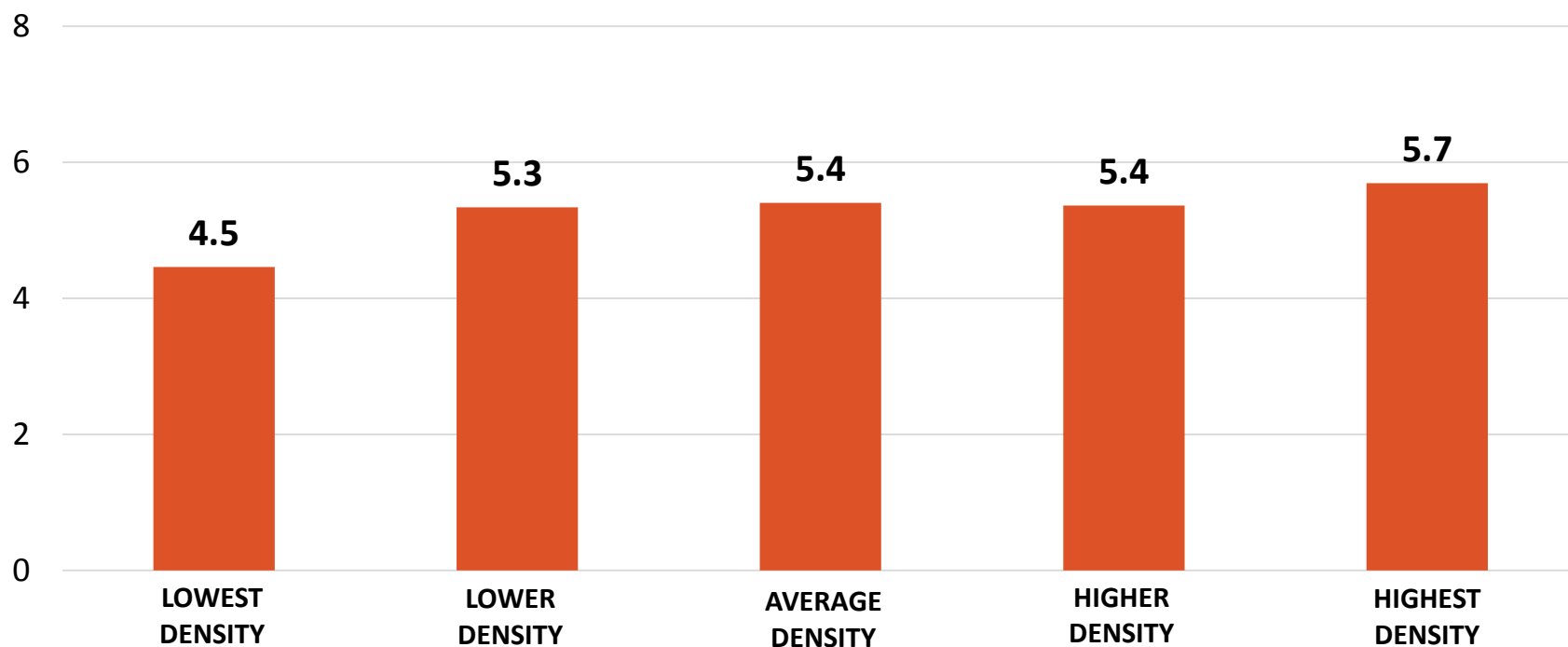*Sources: NYC Department of Education, U.S. Census, Neighborhood Change Database, NYU Furman Center*

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# Higher density neighborhoods had slightly more retail options.

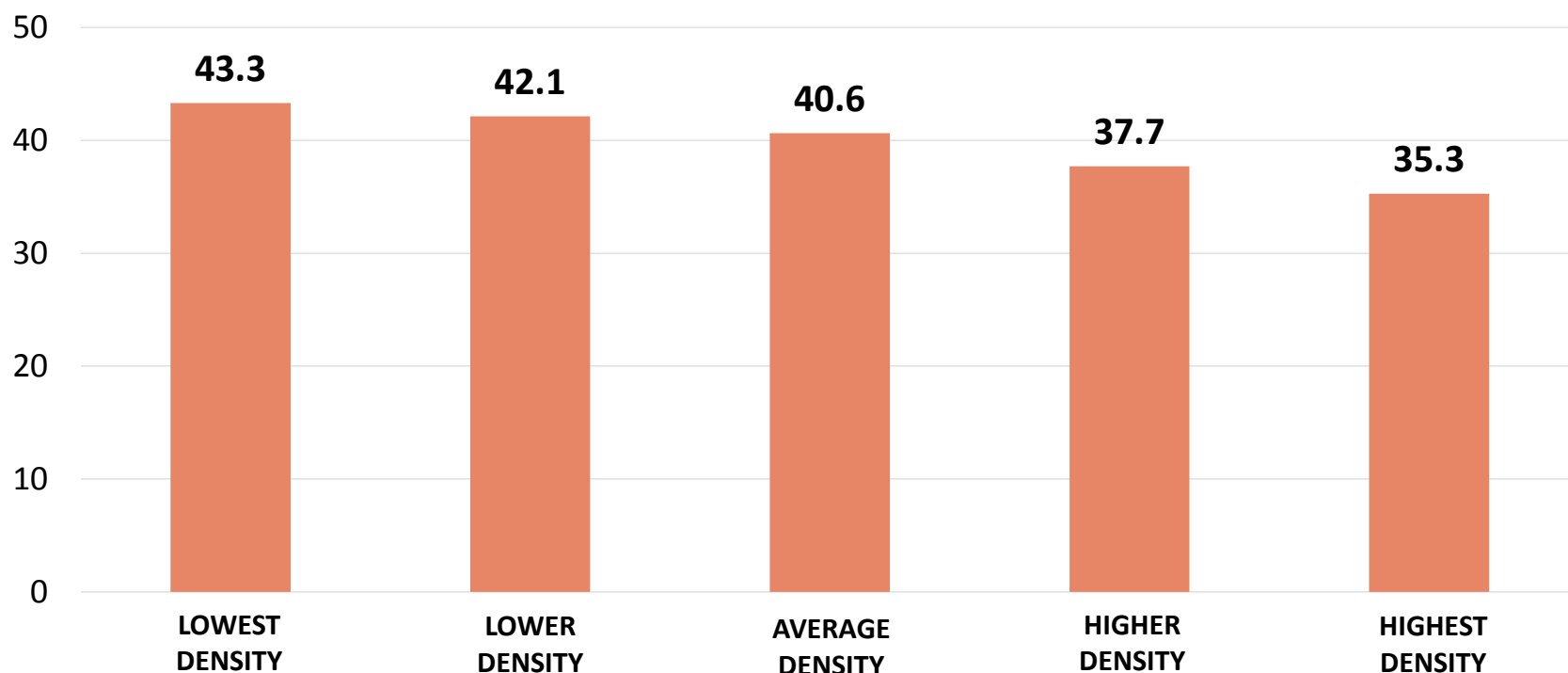## Retail Establishments per 1,000 Residents & Non-Resident Workers



*Sources: National Establishment Time Series, U.S. Census, Neighborhood Change Database, NYU Furman Center*

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# Residents in higher density neighborhoods had shorter commutes.

## Mean Travel Time to Work (Minutes), 2013



| | LOWEST DENSITY | LOWER DENSITY | AVERAGE DENSITY | HIGHER DENSITY | HIGHEST DENSITY |
|---|---|---|---|---|---|
| Value | 43.3 | 42.1 | 40.6 | 37.7 | 35.3 |

*Sources: U.S. Census, Neighborhood Change Database, NYU Furman Center*

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In 2013, the New York City Department of City Planning projected that the city's population will grow by approximately 578,000 people between 2010 and 2030 to reach a new high of 8.82 million.