

How NYCHA Preserves Diversity in New York's Changing Neighborhoods

New York City is known for its rich cultural, racial, and ethnic diversity. Home to the most ethnically diverse neighborhood in the United States (Jackson Heights, Queens), and long-recognized as a destination for domestic and international migrants in search of opportunity, diversity is one of the hallmarks of New York as a global city. That diversity would not be the same without public housing. The New York City Housing Authority (NYCHA) houses over 400,000 New Yorkers—1 in every 11 renters in the city—in over 174,000 public housing units.¹ NYCHA's public housing remains a critical source of affordable housing for low-income New Yorkers, and as such, plays an important role in maintaining the racial/ethnic and economic diversity of the city as a whole.²

Historically, the siting of public housing in low-income and often predominantly Black neighborhoods helped to reinforce patterns of economic and racial segregation. But today, many neighborhoods around public housing have changed, and the stock is no longer so concentrated in high-poverty communities. Public housing now provides long term opportunities for low-income households to live in neighborhoods that would otherwise be likely too costly for them to afford, and in so doing, the stock contributes to and in many cases anchors the diversity of many of the city's neighborhoods.³

¹ U.S. Department of Housing and Urban Development. "Picture of Subsidized Households". (2017).

² Note NYCHA also oversees about 90,000 housing vouchers that the analysis in this report does not include.

³ Neighborhoods are defined as sub-borough areas (SBAs). SBAs are geographic units created by the U.S. Census Bureau for the administration of the New York City Housing and Vacancy Survey. These same areas are also defined by the U.S. Census Bureau as Public Use Microdata Areas (PUMAs). There are 55 SBAs in New York City.



NYCHA Provides Housing for a Diverse Group of New Yorkers

NYCHA provides housing to a diverse group of individuals and families with 32.5 percent of the population under 18 years of age and 20.4 percent of the population over 62 years of age.⁴ For individuals aged 18-61, the employment rate (60.0%) for NYCHA residents was comparable to the city overall (62.0%) in 2015.⁵ Public housing is also home to nearly 90,000 workers across the city who provide critical services to all New Yorkers as employees of the New York City Department of Education, New York City Police Department, the Metropolitan Transportation Authority, and Partners in Care, a home health care agency.⁶ Additionally, only 7.1 percent of public housing households included government welfare programs as the main source of income and 19.1 percent of public housing residents had a disability.⁷

New Yorkers Who Live in Public Housing Bring Diversity to the City as a Whole

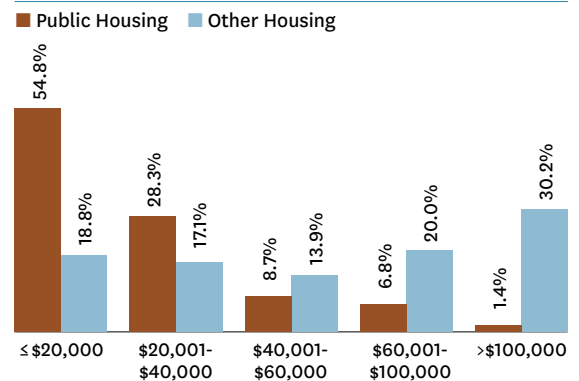
While New York's public housing is home to a diversity of residents, New Yorkers who lived in public housing in 2017 had significantly lower household incomes and were far more likely to be Black or Hispanic than New Yorkers living in other types of housing. The differences in household

income reflect the important role public housing plays as a stable home for many of New York City's poorest households.⁸

Income

The median household income for all public housing residents in New York City was \$18,473 in 2017, significantly less than the median household income for residents of other housing during that same year (\$61,297).⁹ Figure 1 shows the household income distribution for public housing residents compared to residents in all other types of housing. Notably, 54.8 percent of public housing households earned less than or equal to \$20,000 in 2017 compared to 18.8 percent of households in other housing (Figure 1). Only 6.8 percent of households in public housing earned between \$60,001 and \$100,000 compared to 20.0 percent of households in other housing. Finally, a very small share (1.4%) of public housing households earned above \$100,000, while over 30.0 percent of other households had incomes this high.¹⁰

Figure 1. Household Income Distribution in New York City by Housing Type, 2017



Sources: New York City Housing and Vacancy Survey (Household Records), NYU Furman Center

4 New York City Housing Authority (NYCHA). "NYCHA 2018 Fact Sheet". (2018)

5 Regional Planning Association. "NYCHA's Crisis: A Matter for All New Yorkers". (2018)

6 Regional Planning Association. "NYCHA's Crisis: A Matter for All New Yorkers". (2018)

7 U.S. Department of Housing and Urban Development. "Picture of Subsidized Households". (2017).

8 NYU Furman Center. "NYCHA's Outsized Role in Housing New York's Poorest Households". (2018). http://furmancenter.org/files/NYCHA_Brief_12-17-18.pdf

9 New York City Housing and Vacancy Survey (Household Records), 2017

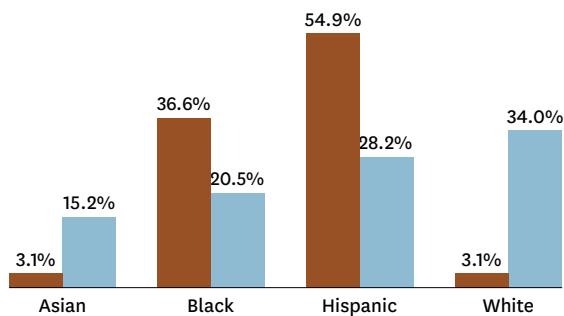
10 Public housing residents are required to pay 30 percent of their income on rent, so higher income households pay higher rents.



Racial/Ethnic Identity

Compared to the demographics of the city as a whole, public housing residents are far more likely to be Black or Hispanic. In 2017, over 90.0 percent of public housing residents were Black or Hispanic, while their total makeup in other types of housing was under 50.0 percent (Figure 2). Specifically, 54.9 percent of residents living in public housing were Hispanic, 36.6 percent were Black, 3.1 percent were white, and 3.1 percent were Asian.¹¹

Figure 2. Shares of Racial/Ethnic Groups in New York City by Housing Type, 2017



Sources: New York City Housing and Vacancy Survey (Person Records), NYU Furman Center

While the majority of public housing residents are Black or Hispanic, the racial/ethnic composition of public housing residents differs at the development level across neighborhoods (defined as sub-borough areas). This pattern is often consistent with the broader patterns of racial and ethnic segregation in the city. For example, in East Flatbush, a predominantly Black neighborhood, nearly all public housing residents were Black in 2017. In University Heights/Fordham and Bushwick, both predominantly Hispanic neighborhoods, more than 80.0 percent of public housing residents were Hispanic. By contrast, in Mid-Island and North Shore, both predominantly white neighborhoods in Staten Island, 38.7 and 35.9 percent of public housing residents were white respectively. Finally, public housing developments in the Lower East Side/Chinatown were 22.7 percent Asian, a higher share

¹¹ “Other” races accounted for 2.4 percent of the public housing population in 2017.

than in any other neighborhood in the city. While the racial and ethnic composition of public housing residents tends to follow that of the neighborhoods where they are located, the Black and Hispanic population shares in most public housing developments were greater than those of the surrounding neighborhood.¹²

Public Housing is Disproportionately Located in Gentrifying Neighborhoods

The development of public housing created long term options for low-income New Yorkers, who are disproportionately Black or Hispanic,¹³ to live in higher-income and gentrifying neighborhoods. Public housing developments are disproportionately located in neighborhoods we have previously identified as gentrifying. We define “gentrifying neighborhoods” as neighborhoods that were low-income in 1990 and experienced rent growth above the median neighborhood rent growth between 1990 and 2014 and we define “higher-income neighborhoods” as neighborhoods that were in the 60th percentile and above of the 1990 neighborhood income distribution.¹⁴ Using these definitions, we find that as of 2017, nearly 60.0 percent of all public housing units were located in gentrifying neighborhoods (Table 1) compared to 26.2 percent of all housing units in gentrifying neighborhoods. Another 27.1 percent of public housing units were located in higher-income neighborhoods (Table 1). Further, in the majority of gentrifying neighborhoods, public housing

¹² New York City Housing and Vacancy Survey (Person Records), 2017
¹³ NYU Furman Center. “Focus on Poverty”. (2016). http://furmancenter.org/files/sotc/SOC_2016_FOCUS_Poverty_in_NYC.pdf

¹⁴ NYU Furman Center. “Focus on Gentrification”. (2016). These definitions were established using the American Community Survey 2010-2014 five-year estimates. In addition to “gentrifying” and “higher-income”, “non-gentrifying neighborhoods” are those that also started off as low-income in 1990 but experienced more modest rent growth. http://furmancenter.org/files/sotc/Part_1_Gentrification_SOCin2015_9JUNE2016.pdf

made up more than 10.0 percent of all homes in 2017 (Appendix A).¹⁵ Consider that in East Harlem, 32.0 percent of homes were in public housing (Appendix A). The public housing units in these neighborhoods preserve economic diversity over the long-term by enabling low-income households to stay in place.

Table 1. Share of Public Housing Units in Gentrifying Neighborhoods and by Neighborhood Type, New York City, 2017

| Gentrifying Neighborhood | % of Public Housing Units |
|---|---------------------------|
| East Harlem | 8.7% |
| Lower East Side/Chinatown | 8.1% |
| Mott Haven/Hunts Point | 7.3% |
| Brownsville/Ocean Hill | 5.3% |
| Central Harlem | 4.8% |
| Morrisania/Belmont | 4.5% |
| Astoria | 4.4% |
| Bedford Stuyvesant | 4.2% |
| Williamsburg/Greenpoint | 2.8% |
| North Crown Heights/Prospect Heights | 2.4% |
| Washington Heights/Inwood | 2.3% |
| Morningside Heights/Hamilton Heights | 2.0% |
| Bushwick | 1.8% |
| South Crown Heights | 0.2% |
| Sunset Park | 0.0% |
| % of Public Housing Units in Gentrifying Neighborhoods | 58.8% |
| % of Public Housing Units in Higher-Income Neighborhoods | 27.1% |
| % of Public Housing Units in Non-Gentrifying Neighborhoods | 14.1% |

Sources: New York City Housing Authority Development Book, NYU Furman Center

Public Housing Plays a Role in Maintaining Neighborhood Diversity

Public housing is disproportionately located in the city's most economically diverse neighborhoods, in part because it helps to lock in diversity as neighborhoods change. In 2017, the ten most economically diverse neighborhoods in the city, as measured by the income diversity ratio, or the ratio of the 80th percentile household income to the 20th percentile household income, housed over a third of the city's public housing units (as compared to less than a fifth of all housing units). Table 2 shows the ten neighborhoods with the highest income diversity ratios and the percentage of public housing units citywide located within each of these neighborhoods. Six of the top ten most economically diverse neighborhoods were gentrifying neighborhoods (highlighted in blue) and three were higher-income (highlighted in black), and public housing comprised a significant share of the homes in these neighborhoods.¹⁶ In the Lower East Side/Chinatown, one in five homes was in a public housing development (Appendix A).

Table 2. Neighborhoods with the Highest Income Diversity Ratios, New York City, 2017

| | Income Diversity Ratio | % of Public Housing Units |
|------------------------------|------------------------|---------------------------|
| Brownsville/Ocean Hill | 9.7 | 5.3% |
| Central Harlem | 9.3 | 4.8% |
| Upper West Side | 9.2 | 2.9% |
| Lower East Side/Chinatown | 8.5 | 8.1% |
| Morningside Hts/Hamilton Hts | 8.2 | 2.0% |
| Coney Island | 8.2 | 3.3% |
| Williamsburg/Greenpoint | 7.7 | 2.8% |
| Chelsea/Clinton/Midtown | 7.5 | 1.4% |
| Bushwick | 7.0 | 1.8% |
| North Shore | 6.9 | 1.8% |

Sources: American Community Survey 2013-17, New York City Housing Authority Development Book, NYU Furman Center

Note: Gentrifying Neighborhoods are in Blue; Higher-Income Neighborhoods are in Black; Non-Gentrifying Neighborhoods are in red.

¹⁵ Appendix A provides further information at the neighborhood-level on the share of occupied housing units that are public housing units.

¹⁶ Coney Island was a "non-gentrifying" neighborhood per the 2016 Furman Center definitions.



These neighborhoods would likely be less economically diverse if the respective housing stocks did not include public housing developments because of the demographic makeup of public housing residents. In order to better understand how public housing residents contributed to the diversity of their neighborhoods, we identified block groups that are primarily composed of public housing units and then calculated the income distribution and racial/ethnic diversity for neighborhoods with and without these block groups. The tables below refer to these calculations as those “with public housing residents” and “without public housing residents” respectively.¹⁷

Table 3 shows that when public housing residents are included in the population count, the share of residents with incomes less than or equal to \$40,000 in East Harlem, Lower East Side/Chinatown, and Astoria was five or six percentage points higher than the share for residents living in other types of housing in those neighborhoods. We see similar differences in higher-income neighborhoods. For example, in Park Slope/Carroll Gardens, when we include public housing residents, the share of residents with incomes less than or equal to \$40,000 was four percentage points higher than when they are excluded.

¹⁷ Specifically, we identify block groups as being predominantly public housing if at least 70 percent of residences are public housing units. We draw on data from the New York City Housing Authority (NYCHA) and the American Community Survey (ACS) 2013-2017 in making these estimates.

Table 3. Share of Households with Incomes below \$40,000 and Shares of Residents who were Black and Hispanic in Gentrifying and Higher-Income Neighborhoods, New York City, 2017

| | % of Households with Incomes ≤ \$40,000 | | | % Black | | | % Hispanic | | |
|------------------------------|---|----------------------------------|--------------------|-------------------------------|----------------------------------|--------------------|-------------------------------|----------------------------------|--------------------|
| | With Public Housing Residents | Without Public Housing Residents | % Point Difference | With Public Housing Residents | Without Public Housing Residents | % Point Difference | With Public Housing Residents | Without Public Housing Residents | % Point Difference |
| East Harlem | 56% | 50% | -6% | 30% | 26% | -4% | 46% | 44% | -2% |
| Brooklyn Heights/Fort Greene | 28% | 22% | -6% | 2% | 2% | 0% | 11% | 11% | 0% |
| Lower East Side/Chinatown | 48% | 42% | -6% | 7% | 6% | -1% | 25% | 18% | -7% |
| Astoria | 35% | 30% | -5% | 7% | 2% | -5% | 27% | 25% | -2% |
| Brownsville/Ocean Hill | 62% | 58% | -4% | 58% | 58% | 0% | 13% | 11% | -2% |
| Park Slope/Carroll Gardens | 19% | 15% | -4% | 73% | 74% | 1% | 22% | 20% | -2% |
| Bedford Stuyvesant | 48% | 44% | -4% | 11% | 7% | -4% | 16% | 15% | -1% |
| Flatlands/Canarsie | 28% | 25% | -3% | 2% | 2% | 0% | 16% | 16% | 0% |
| Upper West Side | 23% | 20% | -3% | 6% | 5% | -1% | 15% | 12% | -3% |
| Central Harlem | 48% | 45% | -3% | 56% | 56% | 0% | 23% | 21% | -2% |
| Williamsburg/Greenpoint | 37% | 34% | -3% | 1% | 1% | 0% | 14% | 14% | 0% |
| Rockaways | 41% | 38% | -3% | 35% | 34% | -1% | 24% | 23% | -1% |
| Mott Haven/Hunts Point | 69% | 66% | -3% | 29% | 27% | -2% | 67% | 69% | 2% |
| Sheepshead Bay/Gravesend | 38% | 36% | -2% | 3% | 3% | 0% | 41% | 41% | 0% |
| Morningside Hts/Hamilton Hts | 45% | 43% | -2% | 22% | 20% | -2% | 38% | 37% | -1% |
| Bushwick | 45% | 43% | -2% | 31% | 31% | 0% | 16% | 16% | 0% |
| North Crown Hts/Prospect Hts | 43% | 41% | -2% | 63% | 62% | -1% | 8% | 7% | -1% |
| North Shore | 36% | 34% | -2% | 21% | 21% | 0% | 30% | 29% | -1% |
| Pelham Parkway | 42% | 40% | -2% | 21% | 21% | 0% | 47% | 46% | -1% |

Continued on page 6.

Note: Gentrifying Neighborhoods are in Blue; Higher-Income Neighborhoods are in Black



| | % of Households with Incomes ≤ \$40,000 | | | % Black | | | % Hispanic | | |
|---------------------------|---|----------------------------------|--------------------|-------------------------------|----------------------------------|--------------------|-------------------------------|----------------------------------|--------------------|
| | With Public Housing Residents | Without Public Housing Residents | % Point Difference | With Public Housing Residents | Without Public Housing Residents | % Point Difference | With Public Housing Residents | Without Public Housing Residents | % Point Difference |
| Washington Heights/Inwood | 45% | 44% | -1% | 8% | 8% | 0% | 69% | 69% | 0% |
| Morrisania/Belmont | 67% | 66% | -1% | 31% | 30% | -1% | 63% | 63% | 0% |
| Throgs Neck/Co-op City | 36% | 35% | -1% | 28% | 27% | -1% | 38% | 38% | 0% |
| Hillcrest/Fresh Meadows | 33% | 32% | -1% | 12% | 11% | -1% | 19% | 19% | 0% |
| Jamaica | 34% | 33% | -1% | 61% | 61% | 0% | 17% | 17% | 0% |
| Mid-Island | 28% | 27% | -1% | 4% | 4% | 0% | 14% | 14% | 0% |
| Riverdale/Kingsbridge | 35% | 34% | -1% | 12% | 12% | 0% | 48% | 48% | 0% |
| Williamsbridge/Baychester | 41% | 40% | -1% | 65% | 66% | 1% | 23% | 22% | -1% |
| Bay Ridge | 34% | 34% | 0% | 27% | 23% | -4% | 15% | 12% | -3% |
| Flatbush | 41% | 41% | 0% | 7% | 4% | -3% | 17% | 15% | -2% |
| Chelsea/Clinton/Midtown | 25% | 25% | 0% | 6% | 5% | -1% | 15% | 15% | 0% |
| South Crown Heights | 43% | 43% | 0% | 5% | 3% | -2% | 23% | 22% | -1% |
| Borough Park | 46% | 46% | 0% | 19% | 18% | -1% | 57% | 57% | 0% |

Sources: American Community Survey 2013-17, NYU Furman Center

Note: Gentrifying Neighborhoods are in Blue; Higher-Income Neighborhoods are in Black

Although the percentage point differences in the share earning under \$40,000 when calculated with and without public housing residents may appear modest in 2017, these differences (and the role that public housing plays in locking in economic diversity over the long term) will grow larger if these neighborhoods continue to attract higher income residents and their rents continue to rise.

In eight gentrifying neighborhoods and 21 higher-income neighborhoods, we also see differences between the racial composition of all residents (including public housing residents) and the racial composition of only the residents that do not live in public housing. Once again, we see sharp differences in many of the gentrifying neighborhoods listed above. In particular, when we include public housing residents in the population count, the combined Black and Hispanic population share rises by five to eight percentage points in Astoria, Lower East Side/Chinatown, Bedford-Stuyvesant, and East Harlem (Table 3). In higher-income neighborhoods with relatively large numbers of public housing units like the Upper West Side, Bay

Ridge, and Flatbush, the full population also had significantly higher Black and Hispanic population shares than just the residents living outside of public housing (Table 3).

The racial/ethnic diversity index, which measures the probability two randomly chosen people in a given geographic area will be of a different race, provides additional insight into how public housing residents help enhance diversity at the neighborhood level (Table 4).¹⁸ For reference, New York City's overall racial/ethnic diversity index in 2017 was 0.74.¹⁹ Notably, several higher-income neighborhoods were made more racially/ethnically diverse through public housing. In neighborhoods like the Upper West Side, Park Slope/Carroll Gardens, Brooklyn Heights/Fort Greene, Sheepshead Bay/Gravesend, and Chelsea/Clinton/Midtown, the racial/ethnic diversity index was higher when public housing residents were

18 A higher number indicates a more racially/ethnically diverse population. For example, if a geographic area is inhabited by a single group, its racial/ethnic diversity index (RDI) would be zero.

19 American Community Survey 2013-2017, NYU Furman Center



included (Table 4). Five gentrifying neighborhoods were also more racially/ethnically diverse when public housing residents were included in the calculation: Astoria, the Lower East Side/Chinatown, Bedford-Stuyvesant, Williamsburg/Greenpoint, and Brownsville/Ocean Hill.

Table 4. Racial/Ethnic Diversity Index Differences for Selected Gentrifying and Higher-Income Neighborhoods, New York City, 2017

| | With Public Housing Residents | Without Public Housing Residents | Difference |
|------------------------------|--|---|------------|
| Astoria | 0.68 | 0.63 | -0.05 |
| Upper West Side | 0.52 | 0.47 | -0.05 |
| Park Slope/Carroll Gardens | 0.54 | 0.49 | -0.04 |
| Brooklyn Heights/Fort Greene | 0.69 | 0.65 | -0.04 |
| Sheepshead Bay/Gravesend | 0.51 | 0.48 | -0.03 |
| Chelsea/Clinton/Midtown | 0.60 | 0.57 | -0.02 |
| Lower East Side/Chinatown | 0.72 | 0.70 | -0.02 |
| Mott Haven/Hunts Point | 0.47 | 0.45 | -0.02 |
| Bedford Stuyvesant | 0.65 | 0.63 | -0.02 |
| Rockaways | 0.70 | 0.69 | -0.01 |
| Williamsbridge/Baychester | 0.52 | 0.51 | -0.01 |
| Williamsburg/Greenpoint | 0.54 | 0.53 | -0.01 |
| Brownsville/Ocean Hill | 0.42 | 0.41 | -0.01 |

Sources: American Community Survey 2013-17, NYU Furman Center

Note: Gentrifying Neighborhoods are in Blue; Higher-Income Neighborhoods are in Black

Conclusion

As New York City continues to experience shifting demographics and an overall rise in market rents, the city's public housing portfolio enhances the economic diversity and racial/ethnic diversity of many of its neighborhoods. Without public housing, low-income New Yorkers, who are disproportionately Black and Hispanic,²⁰ would have few viable housing options in higher-income neighborhoods and a diminishing number in gentrifying neighborhoods. That said, in prior research we conducted with Abt Associates, we found that public housing residents did not always feel connected to the neighborhoods that surrounded their campuses. Further, even if their rents remain affordable, the visible changes and the rising costs of goods and services around them can feel like pressure to leave the neighborhood.²¹ Therefore the larger effort to maintain public housing in the city should be coupled with strategic efforts to integrate public housing residents in the new commercial and social landscape of changing neighborhoods to ensure all residents can experience the positive benefits diversity offers.

20 NYU Furman Center. "Focus on Poverty". (2016). http://furmancenter.org/files/sotc/SOC_2016_FOCUS_Poverty_in_NYC.pdf

21 Abt Associates and NYU Furman Center. "The Effects of Neighborhood Change on New York City Housing Authority Residents". (2015). https://nextcity.org/pdf/nycha_ceo_report.pdf



Appendix A

Share of Total Housing Units that are in a Public Housing Development by Neighborhood, New York City, 2017

| Neighborhood | % of Total Housing Units in Public Housing Developments | Neighborhood | % of Total Housing Units in Public Housing Developments |
|--------------------------------------|--|--------------------------------------|--|
| East Harlem | 31.8% | Highbridge/South Concourse | 3.3% |
| Mott Haven/Hunts Point | 25.3% | Mid-Island | 3.0% |
| Brownsville/Ocean Hill | 21.1% | Chelsea/Clinton/Midtown | 2.9% |
| Lower East Side/Chinatown | 19.6% | Jamaica | 2.7% |
| Central Harlem | 15.6% | Upper East Side | 1.1% |
| Bedford Stuyvesant | 14.2% | Flushing/Whitestone | 1.1% |
| Morrisania/Belmont | 13.9% | Riverdale/Kingsbridge | 0.8% |
| Coney Island | 13.1% | South Crown Heights | 0.6% |
| Soundview/Parkchester | 13.1% | Stuyvesant Town/Turtle Bay | 0.6% |
| East New York/Starrett City | 12.9% | Kingsbridge Heights/Mosholu | 0.5% |
| Brooklyn Heights/Fort Greene | 12.3% | East Flatbush | 0.3% |
| Astoria | 10.6% | Sunset Park | 0.0% |
| North Crown Heights/Prospect Heights | 8.0% | Greenwich Village/Financial District | 0.0% |
| Williamsburg/Greenpoint | 7.6% | Borough Park | 0.0% |
| Morningside Heights/Hamilton Heights | 7.4% | Flatbush | 0.0% |
| Pelham Parkway | 7.4% | South Shore | 0.0% |
| Bushwick | 7.0% | Rego Park/Forest Hills | 0.0% |
| Williamsbridge/Baychester | 6.7% | Bay Ridge | 0.0% |
| Rockaways | 6.4% | Bayside/Little Neck | 0.0% |
| Flatlands/Canarsie | 6.4% | Sunnyside/Woodside | 0.0% |
| Park Slope/Carroll Gardens | 5.8% | Middle Village/Ridgewood | 0.0% |
| Washington Heights/Inwood | 5.3% | Ozone Park/Woodhaven | 0.0% |
| Upper West Side | 5.2% | Queens Village | 0.0% |
| Throgs Neck/Co-op City | 5.2% | South Ozone Park/Howard Beach | 0.0% |
| North Shore | 5.1% | Elmhurst/Corona | 0.0% |
| Sheepshead Bay/Gravesend | 3.9% | Jackson Heights | 0.0% |
| Hillcrest/Fresh Meadows | 3.7% | Bensonhurst | 0.0% |
| University Heights/Fordham | 3.7% | | |

Sources: Housing and Vacancy Survey (Household Records), New York City Housing Authority Development Book, NYU Furman Center

Note: Gentrifying Neighborhoods are in Blue; Higher-Income Neighborhoods are in Black; Non-Gentrifying Neighborhoods are in red.



Appendix B: Definitions and Data Sources

Neighborhood and Housing Definitions

Public Housing: Public housing is constructed, owned, and operated by a public agency. In New York City, the New York City Housing Authority (NYCHA) owns and manages public housing units, which receive operating subsidies from U.S. Department of Housing and Urban Development (HUD).

Other Housing: All rental units and owned units that are were not located within NYCHA's public housing developments in 2017.

Neighborhood: Neighborhoods are defined by sub-borough areas (SBAs). Sub-borough areas are geographic units created by the U.S. Census Bureau for the administration of the New York City Housing and Vacancy Survey and were designed to have similar boundaries to those of community districts. These same areas are also defined by the U.S. Census Bureau as Public Use Microdata Areas (PUMAs). There are 59 community districts in New York City but only 55 SBAs.

Gentrifying Neighborhoods: These neighborhoods were low-income in 1990 and experienced rent growth above the median SBA rent growth between 1990 and 2010-2014. Of the 22 neighborhoods that were low-income in 1990, 15 are classified as gentrifying.

Higher-Income Neighborhoods: These neighborhoods were already high-income in 1990. Thirty-three neighborhoods are classified as higher-income.

Diversity Indicator Definitions

Income Distribution: This indicator measures the share of households with a household income in one of three brackets: less than or equal to \$20,000, \$20,001-40,000, \$40,001-60,000, \$60,001-100,000, and greater than \$100,000. ACS data reported is from five-year estimates at the block group level.

Income Diversity Ratio: This indicator measures the income diversity ratio by dividing the income earned by the 80th percentile household by the income earned by the 20th percentile household, excluding all households without positive income. For example, if the 80th percentile income is \$75,000 and the 20th percentile income is \$15,000, then the income diversity ratio is 5.0. A higher ratio indicates a broader spread of incomes.

Racial/Ethnic Composition (Asian, Black, Hispanic, White): This indicator measures the percentage of the total population made up of each of the following racial/ethnic groups: Asian (non-Hispanic), Black (non-Hispanic), Hispanic (of any race), and white (non-Hispanic). The percentages of the four groups may not add up to 100 because people of other races or two or more races are not displayed. ACS data reported is from five-year estimates at the block group level.

Racial/Diversity Index (RDI): The Racial Diversity Index (RDI) measures the probability that two randomly chosen people in a given geographic area will be of a different race. The NYU Furman Center uses the categories of Asian (non-Hispanic), black (non-Hispanic), Hispanic (of any race), and white (non-Hispanic) to calculate the index. People identifying as some other race or reporting more than one race are excluded from this calculation. Nonetheless, the groups we focus on accounted for 97.1 percent of New York City's population in 2017. ACS data reported is from five-year estimates at the block-group level. The RDI is calculated using the following formula:

$$RDI = 1 - (P2_{Asian} + P2_{black} + P2_{Hispanic} + P2_{white})$$



Data Sources

New York City Housing Authority Development

Data Book: The Development Data Book is compiled by NYCHA almost every year and lists public housing developments alphabetically. The database includes information on the development identification numbers, program and construction type, number of apartments and rental rooms, population, number of buildings and stories, street boundaries, and political districts for each development.

New York City Housing and Vacancy Survey (HVS):

The New York City Housing and Vacancy Survey is conducted every three years by the U.S. Census Bureau under contract with the City of New York. The New York City Department of Housing Preservation and Development sponsors and supervises the HVS. The HVS includes a person records and a household records. Our report utilizes the person records for racial/ethnic identity and the household records for income. As a sample survey, HVS is subject to sampling and non-sampling errors. For this reason, related findings are “estimates” of the true value of the variables, which are unknown.

American Community Survey (ACS): The ACS is an annual survey that collects data similar to those formerly collected by the census long form described above. As with the long form, the ACS covers only a sample of individuals and housing units. However, the ACS uses a smaller sample: the long form covered one out of every six housing units while the ACS only covers one in 40 housing units each year. Our report only utilizes the five-year estimate for 2013-17. Most of the indicators from the ACS in this report are derived from pre-compiled summary tables reported by the U.S. Census Bureau.

About the NYU Furman Center

The NYU Furman Center advances research and debate on housing, neighborhoods, and urban policy. Established in 1995, it is a joint center of the New York University School of Law and the Wagner Graduate School of Public Service. More information can be found at furmancenter.org and [@FurmanCenterNYU](https://twitter.com/FurmanCenterNYU).