Appendix B: NYC Housing Market Study

NEW YORK CITY HOUSING MARKET STUDY

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Prepared for the New York City Department of City Planning

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CONTENTS

A. EXECUTIVE SUMMARY

This report provides a summary of supply and demand characteristics of the New York City Housing Market and a price signal by residential Neighborhood Tabulation Area (NTA) that serves as a proxy for market strength.

Introduction and Housing Market Overview

New York City had a total inventory of 3,664,318 housing units in 2023[1]. The inventory primarily consisted of multifamily units, although there were large areas of the city outside of Manhattan that were predominantly 1-2 family districts, and most New Yorker's rented the units they occupied. Over the past several decades the pace of housing development has not kept up with population and job growth. The result is a market that puts strain on households through overcrowding, high pricing, quality issues, and residential distances from work that result in long commutes. Key annual measures of housing growth adequacy - such as number of new units as a percent over all units, number of new units per capita, and number of new units per new job - are significantly lower than in other major cities.

Housing Supply by NTA

Within each NTA, supply of housing is indicated by levels of population and household income, housing typology and tenure, and historic housing production. The information provided below highlights significant characteristics and key metrics of the NTAs, presenting an overview of the composition and variety of the city's housing market.

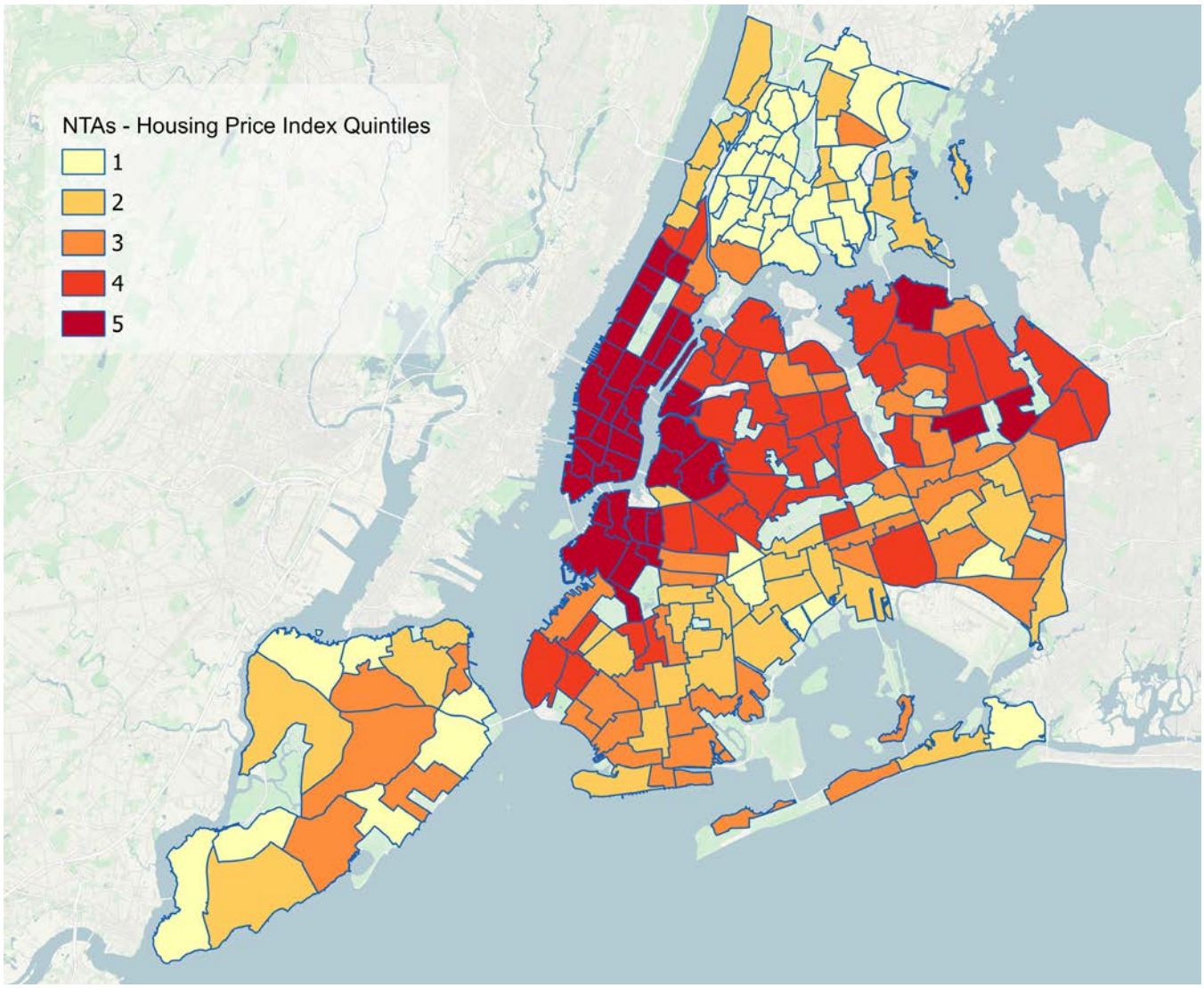
- **Demographics** — Based on U.S. 2020 Census data, the NTAs with both the highest and lowest population densities are in Queens - Elmhurst and Old Astoria/Hallets Point respectively. The NTA with the highest median income was Tribeca Manhattan, and the lowest was Brownsville in Brooklyn. Seven of the ten NTAs with the lowest median incomes are in the Bronx. Eight of the ten NTAs with the highest percentage of individuals living below the poverty level are also in the Bronx, with the NTA with the greatest percentage in South Williamsburg, Brooklyn.
- **Housing Typologies and Tenure** — New York City's housing is primarily multi-family rental, with the highest amount of multi-family housing around strong transit nodes, and more 1-3 family home concentrations in the peripheries of the city. Similarly, areas with higher owner-occupancy rates are generally located in auto dependent areas with limited multi-family zoning.
- **Housing Production** — The greatest housing production in the past ten years has occurred in Long Island City and Williamsburg, with lower housing production primarily in NTAs that are generally at zoning capacity, such as the Upper East Side and the West Village.

[1] NYC Department of Finance Property Tax System (PTS) via NYC Department of City Planning's Primary Land Use Tax Lot Output (PLUTO).

Housing Demand by NTA

BJH compiled a housing database which included information on price signals - in the form of recorded sales amounts, asking rents, and self-reported rents per square foot - from the New York City Department of Finance, Moody's REIS, and the U.S. Census respectively. Analysis of pricing for different housing typologies relied on appropriateness of data as well as on quality and availability factors. All data was combined, through a weighted average methodology, by the relative amounts of each kind of housing, resulting in a single price index, the Housing Price Index (HPI), that was applied across the city's residential NTAs. Below are the mapped results of the HPI showing NTAs ranked by quintile for the entire city.

Figure 1: Map of NTAs by Housing Price Index Quintiles



Source: NYC DCP - 2020 Neighborhood Tabulation Areas | U.S. Census Bureau ACS 5-Yr 2017-2021 Estimates - B25058: Median Contract Rent | Moody's Analytics REIS - 2023 Residential Rental Observations with Price per Square Footage Data | NYC DOF -

- The strongest NTAs (fifth quintile) are generally clustered in the transit-rich areas of Manhattan, western Queens, and northern Brooklyn, with three fifth-quintile NTAs of generally single family and auto-oriented districts in eastern Queens.
- Brooklyn and Queens are comprised of all five quintiles, reflecting their diversity of housing typologies, socio-demographic characteristics, and varied transportation access modes from transit-rich corridors to auto-oriented neighborhoods beyond the transit zone.
- Staten Island and the Bronx are comprised of the weaker through middle NTAs (first through third quintiles).

B. INTRODUCTION, REPORT PURPOSE, AND MARKET OVERVIEW

BJH Advisors prepared a high-level, citywide Housing Market Study to provide a baseline understanding of market strength by Neighborhood Tabulation Area (NTA) across New York City. This neighborhood-level market analysis provides a static snapshot of the market forces at play in the housing sector in New York City and insights into which neighborhoods may be most affected by the proposed City of Yes for Housing Opportunity rezoning action, based on these considerations.

Housing Crisis

New York City is experiencing a housing crisis – many New Yorkers are faced with difficult housing choices including overcrowding, longer commutes, and accepting housing at prices that are more than 30 percent of their income which is the definition for rent burden. Now more than ever, people who need quality affordable homes have nowhere or very few places to turn.

Two statistics illustrate the problem. In 2023 the overall rental apartment vacancy rate was at 1.41 percent, a historic low and down from 4.54 percent in 2021 in the aftermath of the Covid-19 Pandemic. Rent burden, the key metric of affordability, is the clearest indicator of the housing crisis: in 2023 the typical renter was severely rent burdened, paying 54 percent of their income for rent. Taken together these two statistics are demonstrative of a market that is not meeting the needs of a large and growing segment of New York City's population[2].

City of Yes for Housing Opportunity

In order to address this shortage of quality affordable housing and establish favorable zoning conditions for increased housing production Mayor Adams proposed the City of Yes for Housing Opportunity in 2023. This citywide rezoning would make it easier to produce more affordable housing in neighborhoods that already allow residential density; would relax certain limiting requirements for office to residential conversions, for the construction of accessory dwelling units (ADUs), and for campus housing; and would remove parking requirements. The plan will set the stage for new production to occur in all residential neighborhoods and zoning districts.

Report Purpose - Development of a Metric to Compare Neighborhood Market Strength

As a part of the approach to better understanding existing housing conditions and where production may be more feasible under the new zoning, the Department of City Planning (DCP) requested a Housing Market Study to identify neighborhoods where additional units could be expected to be produced due to their market strength. As defined in this report, market strength is represented as a function of various housing price signals – the rental or sales price of units. The report ultimately employs a single, aggregate "Housing Price Index" or HPI. More information about the HPI may be found in Section C on Housing Demand by NTA.

[2] 2023 New York City Housing and Vacancy Survey Selected Initial Findings (HVS).

Current Housing Market Overview

This section relies on the 2023 New York City Housing and Vacancy Survey Selected Initial Findings (HVS), prepared by the U.S. Census Bureau on behalf of the City of New York, unless otherwise identified.

The New York City housing market is the largest single-municipality market in the country and it is regularly ranked as the most expensive or one of the most expensive national housing markets. It is a vast and dynamic market of about 3.7 million units ranging from single family homes on large lots to multi-family buildings as tall as 90 stories and more than 1,000 units. It is widely understood that New York City is a city of renters and this is borne out in the data at the aggregate level. However, there are large swaths of the city, particularly in the boroughs outside of Manhattan, that are predominantly owner-occupied submarkets.

Physical Types of Housing

Physical types of housing include single family free-standing homes, single family row houses, two and three family homes, small apartment buildings, and larger multi-family apartment buildings. The Housing Supply by NTA section provides information on which areas of the city are predominantly made up of single family homes and which are predominantly made up of apartment buildings.

Out of the total 2023 inventory, just over 1.0 million units (27 percent) were in buildings of one or two units and about 2.7 million units (73 percent) were in buildings of three or more units which are designated as multiple dwellings under the State's Multiple Dwelling Law. Buildings of 100 units or more comprised about 830,000 units or 22 percent of the total inventory. New York City's housing stock is relatively old, with about 3.0 million units or 80 percent, having been constructed before 1947, and only 418,000 units or 11 percent having been constructed since 2000.

Tenure

Housing tenure refers to the legal status and related financial arrangements of occupancy. The two major categories of tenure are ownership and leasehold or rental housing. Ownership is further broken down into simple ownership of an entire structure as in a free standing house and shared-ownership structures such as condominiums and cooperatives. Leasehold or rental housing denotes a structure under which the unit occupant rents from an owner.

Rental housing in New York City differs from most of the country in that a large proportion of the stock is subject to rent regulation, primarily in the form of rent stabilization, rent control, and public ownership. Rental housing comes in many forms, including a second unit in a two-family where the primary unit is owner-occupied, small apartment buildings owned by a local landlord, larger apartment buildings or complexes that are owned and professionally managed by for-profit real estate companies, housing owned and managed by mission-driven non-profits, and public housing owned by the New York City Housing Authority (NYCHA). There are also numerous specialty types such as senior, supportive, and student housing.

In 2023 the New York City inventory was split by tenure between 1,109,000 units (32.3 percent) that were owner occupied and 2,324,000 units (67.7 percent) that were renter-occupied. As mentioned above, this ratio is notable because it is roughly the inverse of the national average where the homeownership rate in Q4 2023 was 65.7 percent and the renter-occupied rate was 34.3 percent[3]. The HVS also reported in 2023 that there were 272,000 units that were unoccupied due to a number of factors or statuses, including regular vacancy while being held for rent or sale, seasonal or pied a terre use, dilapidation, held for demolition, or legal dispute.

Condominiums and cooperatives refer to a legal form of ownership and can be owner-occupied or renter-occupied. In 2023 there were 318,000 condominium units which were 40 percent owner-occupied and 60 percent renter occupied, and there were 450,800 cooperative units which were 69 percent owner-occupied and 31 percent renter-occupied.

[3] U.S. Census Bureau, QUARTERLY RESIDENTIAL VACANCIES AND HOMEOWNERSHIP, FOURTH QUARTER 2023

The rental housing market is broken down between 1,139,000 market rate units (47.6 percent), 1,072,830 units under rent stabilization, rent control and other programs (44.9 percent), and 178,700 (7.5 percent) in public housing (NYCHA). Unlike most of the United States, less than half of New York City's housing measured by units in the inventory is free-market (e.g. exempt from direct regulation of rental pricing), while just over half is under regulatory supervision.

Supply Change Over Time

According to the DCP's Housing Database, in the 10 year period from 2013-2023 New York City added an average of 23,250 units per year, a rate of production of net new units of well under 1 percent per year[4].

This rate of housing production is far lower than other large cities nationally. Underproduction is a major contributing factor to historically low vacancy rates and high rental and sales prices. Underproduction and its economic effects also contribute to crowding and other negative trends such as rising homelessness and out-migration of New Yorkers who seek more affordable housing in other parts of the country.

New York City's rate of housing permit issuance per capita is among the lowest of major American cities. While not every housing permit results in a completed housing unit, housing permit volume serves as a good indicator of housing market trends. According to data analyzed by the NYU Furman Center, from 2014 through 2021 New York City issued permits at a rate of 23.8 units per 1,000 residents compared to other housing markets such as San Francisco (32.1) and Boston (45.5), which are notoriously difficult to develop in, and less restrictive cities like Houston (51.4), Atlanta (83.8), and Miami (88.0) [5].

Another common metric of the health of a housing market is the ratio of new housing units to new jobs. Generally, a housing market that delivers a similar number of housing units to new jobs is one that meets the needs of most residents and where price growth and crowding are moderated. A 2019 study by the New York City Department of City Planning found that from 2001-2018 the City saw an increase in jobs of 770,000 but only added 407,000 housing units. A 2020 report by the Citizens Budget Commission (CBC) noted that from 2010 to 2017 New York's housing production per job of 0.19 lagged many peer cities, especially in the west and south such as Denver (0.94), Austin (0.63), Seattle (0.56), Dallas (0.52), Houston (0.45), and even Los Angeles (0.42) and Washington, DC (0.34), while, of major cities [6].

The same study found that from 2010 to 2017 that New York City's inventory grew the fourth lowest of cities tracked, at 3.7%, compared to Denver at 21.8%, Austin at 18%, and Seattle at 15.2%.

Low housing production as a percent of current supply, per resident housing, and per new job is a major cause of the housing crisis, and clearly one requirement to ameliorate this crisis is to increase the velocity and diversity of new housing construction.

[4] NYC DCP - Housing Database (based on DOB Open Data)
[5] NYU Furman Center, Critical Land Use and Housing Issues for New York State 2023.
[6] Citizens Budget Commission, Strategies to Boost Housing Production in the New York City Metropolitan Area, August 2020.

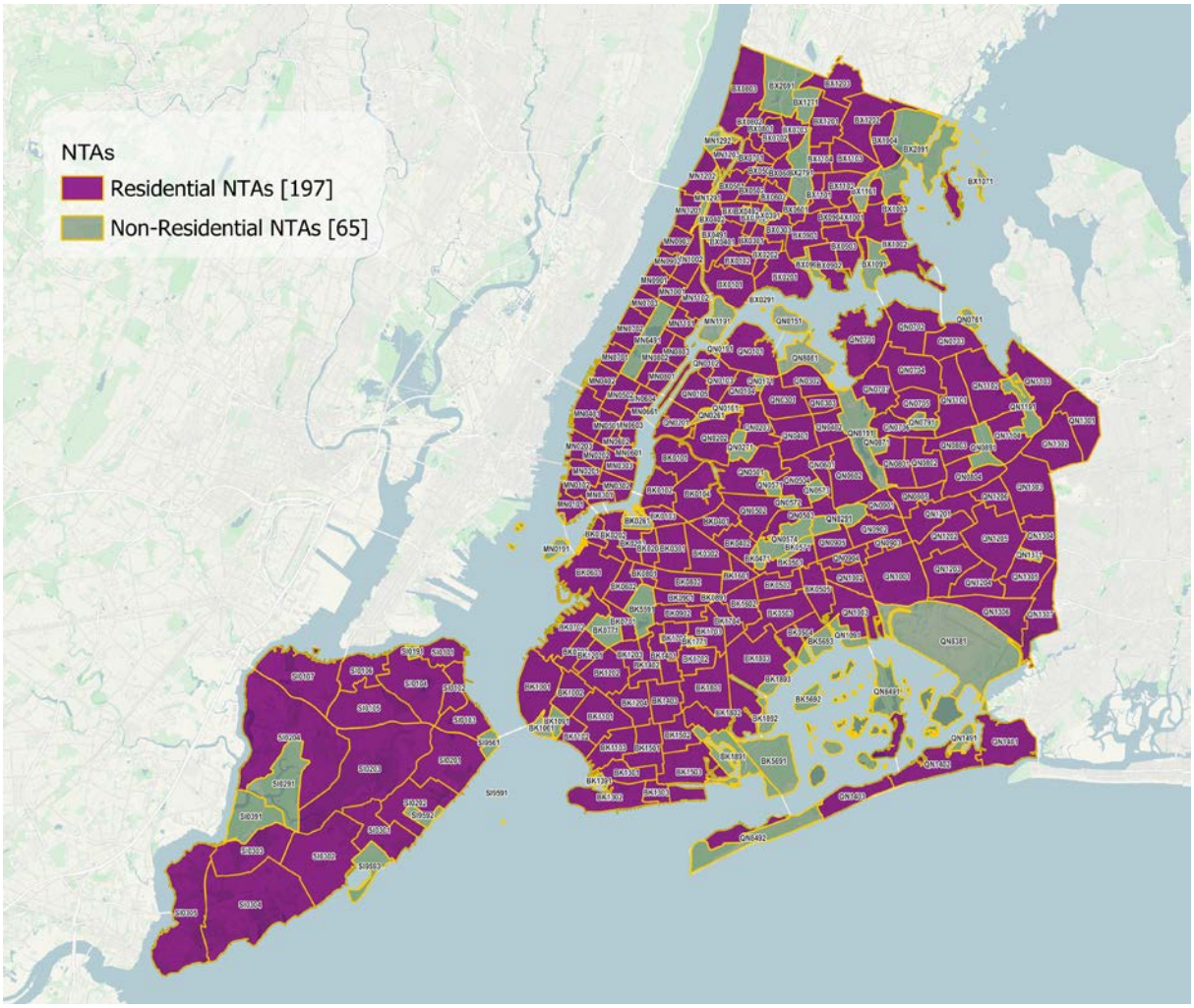
C. GEOGRAPHIC UNIT OF ANALYSIS

The geographic unit for the housing supply and demand analysis that follows consists of aggregations of census tracts known as Neighborhood Tabulation Areas (NTAs), for the following reasons:

- NTAs are medium-sized statistical geographies that roughly correspond to the city's neighborhoods.
- NTAs are built by aggregating census tracts and therefore correspond to the statistical areas most commonly used by the federal government to track population and other metrics used to assess demand.
- With an average population of 45,000, NTAs typically have enough population to avoid sampling variability issues that exist for individual census tracts.

There are currently 262 NTAs in the city, including 197 that contain residential uses and are the subject of the housing demand analysis. The remaining 65 have no residential uses, consisting only of parks, airports, cemeteries, prisons, and other specialized areas. Figure 2 shows a map of all 262 NTAs and the 197 residential NTAs. A list of the residential NTAs and their code numbers appear right after the map.

Figure 2: Map of NTAs in New York City



Source: NYC DCP - 2020 Neighborhood Tabulation Areas

Table 1: Residential NTAs with Code

Brooklyn

NTA Name	NTA Code
Greenpoint	BK0101
Williamsburg	BK0102
South Williamsburg	BK0103
East Williamsburg	BK0104
Brooklyn Heights	BK0201
Downtown Brooklyn-DUMBO-Boerum Hill	BK0202
Fort Greene	BK0203
Clinton Hill	BK0204
Bedford-Stuyvesant (West)	BK0301
Bedford-Stuyvesant (East)	BK0302
Bushwick (West)	BK0401
Bushwick (East)	BK0402
Cypress Hills	BK0501
East New York (North)	BK0502
East New York-New Lots	BK0503
Spring Creek-Starrett City	BK0504
East New York-City Line	BK0505
Carroll Gardens-Cobble Hill-Gowanus-Red Hook	BK0601
Park Slope	BK0602
Windsor Terrace-South Slope	BK0701
Sunset Park (West)	BK0702
Sunset Park (Central)	BK0703
Prospect Heights	BK0801
Crown Heights (North)	BK0802
Crown Heights (South)	BK0901
Prospect Lefferts Gardens-Wingate	BK0902
Bay Ridge	BK1001
Dyker Heights	BK1002
Bensonhurst	BK1101
Bath Beach	BK1102
Gravesend (West)	BK1103
Sunset Park (East)-Borough Park (West)	BK1201
Borough Park	BK1202
Kensington	BK1203
Mapleton-Midwood (West)	BK1204
Gravesend (South)	BK1301
Coney Island-Sea Gate	BK1302
Brighton Beach	BK1303
Flatbush	BK1401
Flatbush (West)-Ditmas Park-Parkville	BK1402
Midwood	BK1403
Gravesend (East)-Homecrest	BK1501
Madison	BK1502
Brighton Beach	BK1303

Brooklyn

NTA Name	NTA Code
Flatbush	BK1401
Flatbush (West)-Ditmas Park-Parkville	BK1402
Midwood	BK1403
Gravesend (East)-Homecrest	BK1501
Madison	BK1502
Sheepshead Bay-Manhattan Beach-Gerritsen Beach	BK1503
Ocean Hill	BK1601
Brownsville	BK1602
East Flatbush-Erasmus	BK1701
East Flatbush-Farragut	BK1702
East Flatbush-Rugby	BK1703
East Flatbush-Remsen Village	BK1704
Flatlands	BK1801
Marine Park-Mill Basin-Bergen Beach	BK1802
Canarsie	BK1803

Queens

NTA Name	NTA Code
Astoria (North)-Ditmars-Steinway	QN0101
Old Astoria-Hallets Point	QN0102
Astoria (Central)	QN0103
Astoria (East)-Woodside (North)	QN0104
Queensbridge-Ravenswood-Dutch Kills	QN0105
Long Island City-Hunters Point	QN0201
Sunnyside	QN0202
Woodside	QN0203
Jackson Heights	QN0301
East Elmhurst	QN0302
North Corona	QN0303
Elmhurst	QN0401
Corona	QN0402
Maspeth	QN0501
Ridgewood	QN0502
Glendale	QN0503
Middle Village	QN0504
Rego Park	QN0601
Forest Hills	QN0602
College Point	QN0701
Whitestone-Beechhurst	QN0702
Bay Terrace-Clearview	QN0703
Murray Hill-Broadway Flushing	QN0704

Queens

NTA Name	NTA Code
East Flushing	QN0705
Queensboro Hill	QN0706
Flushing-Willets Point	QN0707
Kew Gardens Hills	QN0801
Pomonok-Electchester-Hillcrest	QN0802
Fresh Meadows-Utopia	QN0803
Jamaica Estates-Holliswood	QN0804
Jamaica Hills-Briarwood	QN0805
Kew Gardens	QN0901
Richmond Hill	QN0902
South Richmond Hill	QN0903
Ozone Park (North)	QN0904
Woodhaven	QN0905
South Ozone Park	QN1001
Ozone Park	QN1002
Howard Beach-Lindenwood	QN1003
Auburndale	QN1101
Bayside	QN1102
Douglaston-Little Neck	QN1103
Oakland Gardens-Hollis Hills	QN1104
Jamaica	QN1201
South Jamaica	QN1202
Baisley Park	QN1203
Springfield Gardens (North)-Rochdale Village	QN1204
St. Albans	QN1205
Hollis	QN1206
Glen Oaks-Floral Park-New Hyde Park	QN1301
Bellerose	QN1302
Queens Village	QN1303
Cambria Heights	QN1304
Laurelton	QN1305
Springfield Gardens (South)-Brookville	QN1306
Rosedale	QN1307
Far Rockaway-Bayswater	QN1401
Rockaway Beach-Arverne-Edgemere	QN1402
Breezy Point-Belle Harbor-Rockaway Park-Broad Channel	QN1403

The Bronx

NTA Name	NTA Code
Mott Haven-Port Morris	BX0101
Melrose	BX0102
Hunts Point	BX0201
Longwood	BX0202
Morrisania	BX0301
Claremont Village-Claremont (East)	BX0302
Crotona Park East	BX0303
Concourse-Concourse Village	BX0401
Highbridge	BX0402
Mount Eden-Claremont (West)	BX0403
University Heights (South)-Morris Heights	BX0501
Mount Hope	BX0502
Fordham Heights	BX0503
West Farms	BX0601
Tremont	BX0602
Belmont	BX0603
University Heights (North)-Fordham	BX0701
Bedford Park	BX0702
Norwood	BX0703
Kingsbridge Heights-Van Cortlandt Village	BX0801
Kingsbridge-Marble Hill	BX0802
Riverdale-Spuyten Duyvil	BX0803
Soundview-Bruckner-Bronx River	BX0901
Soundview-Clason Point	BX0902
Castle Hill-Unionport	BX0903
Parkchester	BX0904
Westchester Square	BX1001
Throgs Neck-Schuylerville	BX1002
Pelham Bay-Country Club-City Island	BX1003
Co-op City	BX1004
Pelham Parkway-Van Nest	BX1101
Morris Park	BX1102
Pelham Gardens	BX1103
Allerton	BX1104
Williamsbridge-Olinville	BX1201
Eastchester-Edenwald-Baychester	BX1202
Wakefield-Woodlawn	BX1203

Manhattan

NTA Name	NTA Code
Financial District-Battery Park City	MN0101
Tribeca-Civic Center	MN0102
SoHo-Little Italy-Hudson Square	MN0201
Greenwich Village	MN0202
West Village	MN0203
Chinatown-Two Bridges	MN0301
Lower East Side	MN0302
East Village	MN0303
Chelsea-Hudson Yards	MN0401
Hell's Kitchen	MN0402
Midtown South-Flatiron-Union Square	MN0501
Midtown-Times Square	MN0502
Stuyvesant Town-Peter Cooper Village	MN0601
Gramercy	MN0602
Murray Hill-Kips Bay	MN0603
East Midtown-Turtle Bay	MN0604
Upper West Side-Lincoln Square	MN0701
Upper West Side (Central)	MN0702
Upper West Side-Manhattan Valley	MN0703
Upper East Side-Lenox Hill-Roosevelt Island	MN0801
Upper East Side-Carnegie Hill	MN0802
Upper East Side-Yorkville	MN0803
Morningside Heights	MN0901
Manhattanville-West Harlem	MN0902
Hamilton Heights-Sugar Hill	MN0903
Harlem (South)	MN1001
Harlem (North)	MN1002
East Harlem (South)	MN1101
East Harlem (North)	MN1102
Washington Heights (South)	MN1201
Washington Heights (North)	MN1202
Inwood	MN1203

Staten Island	
NTA Name	NTA Code
St. George-New Brighton	BX0101
Tompkinsville-Stapleton-Clifton-Fox Hills	BX0102
Rosebank-Shore Acres-Park Hill	BX0201
West New Brighton-Silver Lake-Grymes Hill	BX0202
Westerleigh-Castleton Corners	BX0301
Port Richmond	BX0302
Mariner's Harbor-Arlington-Graniteville	BX0303
Grasmere-Arrochar-South Beach-Dongan Hills	BX0401
New Dorp-Midland Beach	BX0402
Todt Hill-Emerson Hill-Lighthouse Hill-Manor Heights	BX0403
New Springville-Willowbrook-Bulls Head-Travis	BX0501
Oakwood-Richmondtown	BX0502
Great Kills-Eltingville	BX0503
Arden Heights-Rossville	BX0601
Annadale-Huguenot-Prince's Bay-Woodrow	BX0602
Tottenville-Charleston	BX0603

Source: NYC DCP - 2020 Neighborhood Tabulation Areas

D. HOUSING SUPPLY BY NTA

The purpose of this section is to present the existing conditions of the city's housing market viewed through the characteristics of the 197 residential NTAs. It offers information and analysis on how the city's current housing supply is arrayed by NTA through significant rankings, metrics, and trends pertaining to the NTAs.

Demographics

The following tables present several high-level demographic and housing market data metrics by NTA. All data was sourced from NYC Decennial Census Data 2010-2020[7].

Table 2 and Table 3 illustrate Top and Bottom Ten NTAs by Total Population, respectively. According to the 2020 U.S. Census, for the 197 residential NTAs, the average population was 44,287 and the median was 40,395, with the highest population found in Elmhurst, Queens at 104,009, and the lowest population in Old Astoria/ Hallets Point, Queens at 13,273.

[7] NYC DCP - NYC Decennial Census Data 2010-2020 Change - Core Geographies (2020 NTAs)

Table 2: Top Ten NTAs by Total Population

NTA Name	NTA Code	Total Population	Rank
Elmhurst	QN0401	104,009	1
Upper West Side (Central)	MN0702	102,851	2
Bensonhurst	BK1101	102,241	3
Jackson Heights	QN0301	93,703	4
Forest Hills	QN0602	92,512	5
Bedford-Stuyvesant (East)	BK0302	92,298	6
Canarsie	BK1803	90,185	7
Bedford-Stuyvesant (West)	BK0301	89,224	8
Crown Heights (North)	BK0802	87,451	9
South Ozone Park	QN1001	86,560	10

Source: U.S. Census Bureau, 2020 Decennial Census

Table 3: Bottom Ten NTAs by Total Population

NTA Name	NTA Code	Total Population	Rank
Old Astoria-Hallets Point	QN0102	13,273	1
Hunts Point	BX0201	14,509	2
Spring Creek-Starrett City	BK0504	15,917	3
Westchester Square	BX1001	16,137	4
Tompkinsville-Stapleton-Clifton-Fox Hills	SI0102	16,355	5
Tottenville-Charleston	SI0305	16,919	6
St. George-New Brighton	SI0101	18,063	7
West Farms	BX0601	18,633	8
Port Richmond	SI0106	19,701	9
Queensboro Hill	QN0706	20,744	10

Source: U.S. Census Bureau, 2020 Decennial Census

Table 4 and 5 show the top and bottom ten NTAs by their median household income in 2020, respectively. The average median amount across all NTAs was $76,432, with the highest median income found in Tribeca-Civic Center, Manhattan at $200,000 and the lowest in Brownsville Brooklyn at $24,233. Tribeca-Civic Center's highest median household income, at $200,000 per household, was followed by the Financial District at $193,429, the Upper East Side at $186,071, and Park Slope with around $174,224. Of the top 10 NTAs by median household income, seven (7) were in Manhattan.

Table 4: Top Ten NTAs by Median Household Income

NTA Name	NTA Code	Median HH Income	Rank
Tribeca-Civic Center	MN0102	$ 200,000	1
Financial District-Battery Park City	MN0101	$ 193,429	2
Upper East Side-Carnegie Hill	MN0802	$ 186,071	3
Park Slope	BK0602	$ 174,224	4
Brooklyn Heights	BK0201	$ 171,607	5
Midtown South-Flatiron-Union Square	MN0501	$ 154,011	6
East Midtown-Turtle Bay	MN0604	$ 152,155	7
Greenwich Village	MN0202	$ 150,464	8
Long Island City-Hunters Point	QN0201	$ 141,161	9
Stuyvesant Town-Peter Cooper Village	MN0601	$ 140,143	10

Source: U.S. Census Bureau, 2020 Decennial Census

The lowest median household income was found in Brownsville, Brooklyn with around $24,000. Out of the bottom ten NTAs for median household income, eight (8) were in The Bronx in 2020.

Table 5: Bottom Ten NTAs by Median Household Income

NTA Name	NTA Code	Median HH Income	Rank
Brownsville	BK1602	$24,233	1
Mott Haven-Port Morris	BX0101	$24,500	2
West Farms	BX0601	$24,803	3
Melrose	BX0102	$25,173	4
Tremont	BX0602	$28,480	5
Belmont	BX0603	$28,588	6
Chinatown-Two Bridges	MN0301	$28,940	7
Morrisania	BX0301	$29,273	8
Claremont Village-Claremont (East)	BX0302	$29,969	9
Hunts Point	BX0201	$31,657	10

Source: U.S. Census Bureau, 2020 Decennial Census

Table 6 on page 18 ranks the top ten NTAs by the percentage of their population living below the poverty line. Similar to Table 5, most of the NTAs in this table with the highest share of their populations in poverty were in The Bronx in 2021 with seven (7) out of the top ten . South Williamsburg, Brooklyn exhibited the highest share of impoverished residents, with 50 percent of its population living in poverty in 2020. This is followed by West Farms, The Bronx with 45 percent of its population impoverished, Mott Haven-Port Morris, The Bronx with 43 percent, and Claremont Village-Claremont (East), The Bronx with 42 percent.

Table 6: Top Ten NTAs by % of Population Below the Poverty Line

NTA Name	NTA Code	% Population Below Poverty	Rank
South Williamsburg	BK0103	50%	1
West Farms	BX0601	45%	2
Mott Haven-Port Morris	BX0101	43%	3
Claremont Village-Claremont (East)	BX0302	42%	4
Melrose	BX0102	41%	5
Brownsville	BK1602	37%	6
Belmont	BX0603	36%	7
Tremont	BX0602	36%	8
Morrisania	BX0301	35%	9
Borough Park	BK1202	34%	10

Source: U.S. Census Bureau, 2020 Decennial Census

As an indication or measure of quality of life related to housing location, Table 7 shows that half of the top ten NTAs by mean driving time to work were in Brooklyn, with the longest mean time at almost 55 minutes for Spring Creek-Starrett City residents. This is followed by Rockaway Beach-Arverne-Edgemere, Queens at around 53 minutes, Parkchester, The Bronx at approximately 52 minutes, and Brownsville, Brooklyn at close to 51 minutes.

Overall, Brownsville, Brooklyn is the only NTA on all "top ten" tables relating to lowest median household incomes, share of population below poverty level, and longest travel times to work.

In terms of diversity, the NTA with the highest non-white population is East Crotona with 99.7 percent non-white, and the NTA with the lowest non-white population is South Williamsburg at 13.7 percent.

Table 7: Top Ten NTAs by Longest Mean Travel Times to Work

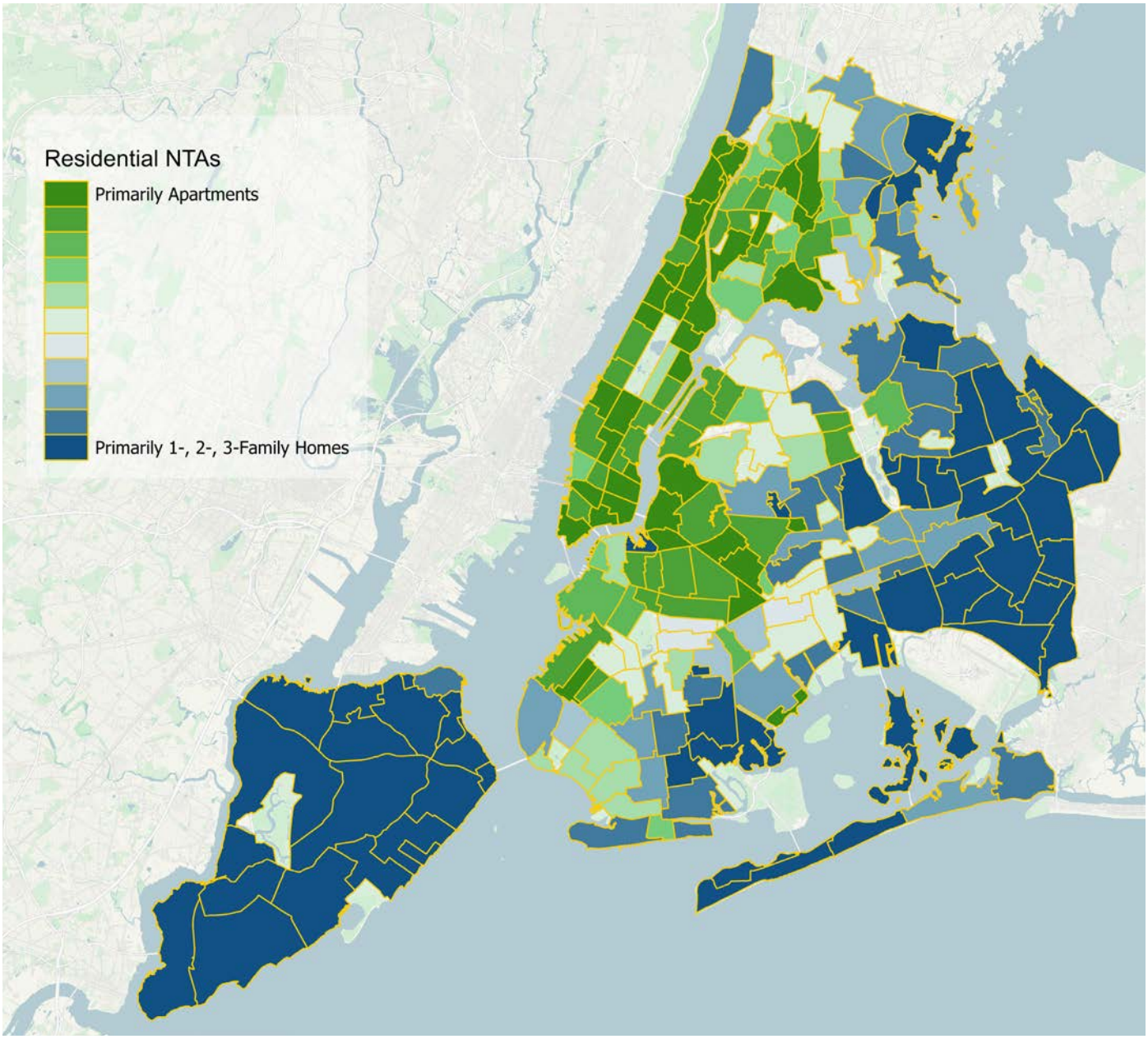
NTA Name	NTA Code	Mean Travel Time to Work (Minutes)	Rank
Spring Creek-Starrett City	BK0504	54.9	1
Rockaway Beach-Arverne-Edgemere	QN1402	53.2	2
Parkchester	BX0904	51.7	3
Brownsville	BK1602	51.4	4
Coney Island-Sea Gate	BK1302	50.8	5
Canarsie	BK1803	50.3	6
Rosedale	QN1307	50.2	7
Flatlands	BK1801	50.0	8
Eastchester-Edenwald-Baychester	BX1202	49.6	9
Cambria Heights	QN1304	49.6	10

Source: U.S. Census Bureau ACS 5-Yr 2017-2021 Estimates

Housing Typologies and Tenure

In terms of housing typologies, the map below indicates most NTAs have a majority of multi-family apartment units versus single family housing. Not surprisingly, NTAs in Manhattan and located proximate to public transportation have more apartments than single family homes; and areas that are more car dependent and located in zones that restrict multi-family buildings have fewer apartments and more single family houses.

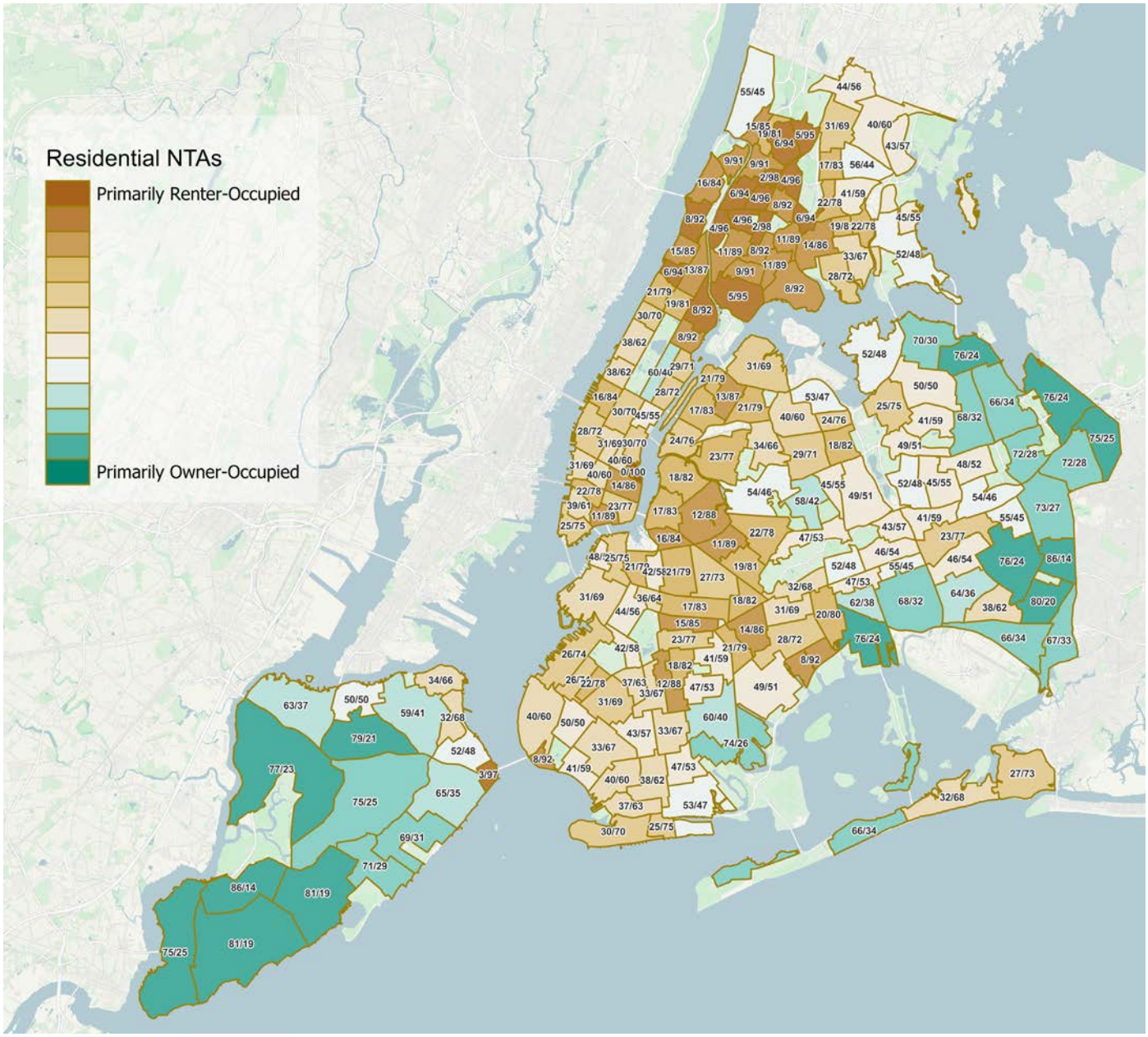
Figure 3: Map of NTAs by Housing Type



Source: NYC DCP - 2020 Neighborhood Tabulation Areas | DOF PTS, via DCP MapPLUTO

As mentioned in the Introduction, New York City is a city of renters, with just over two-thirds of units renter-occupied and just under one-third owner occupied. The map below indicates which NTAs are primarily renter-occupied versus those which are primarily owner-occupied according to self-reported data from the U.S. Census. NTAs closer to the urban core, commercial areas, and those better serviced by public transit are more heavily renter-occupied, than those in the periphery.

Figure 4: Map of NTAs Characterized by Tenure



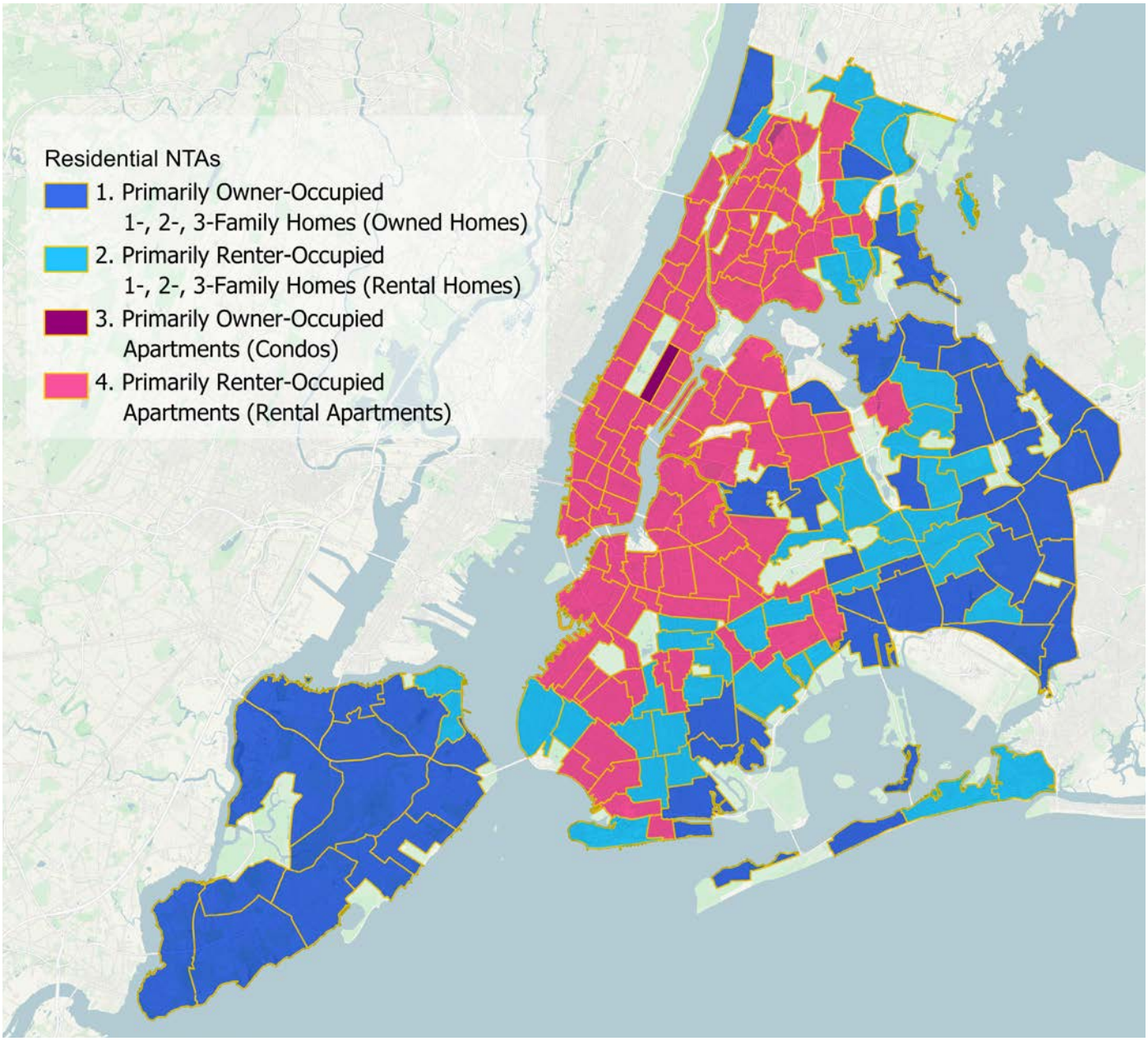
Source: NYC DCP - 2020 Neighborhood Tabulation Areas | U.S. Census Bureau ACS 5-Yr 2017-2021 Estimates - DP04: Selected Housing Characteristics

Combining both dimensions, tenure and type of housing, the map below indicates which NTAs primarily fall into the four typologies below:

1. Owner-occupied 1-3 family homes
2. Rental 1-3 family homes
3. Owner-occupied apartments (condominiums)
4. Rental apartments

This grouping system marks an important framework for the Housing Price Index developed and discussed in the Housing Demand by NTA section.

Figure 5: Map of NTAs Characterized by Tenure and Property Type



Source: NYC DCP - 2020 Neighborhood Tabulation Areas | U.S. Census Bureau ACS 5-Yr 2017-2021 Estimates - DP04: Selected Housing Characteristics, B25003: Tenure

Production

Top ten NTAs for housing production between 2010 and 2023 are shown in Table 8. As noted in the Housing Market Overview, most of these NTAs experienced significant neighborhood rezoning strategies during or immediately prior to this period and are generally well served by public transportation and zoned for medium to high density.

[8] Max developable area based on FAR minus built area, PLUTO

Bottom ten NTAs for housing production between 2010 and 2023 are presented in Table 9. These areas are for the most part substantially built to their permitted zoning maximum density[8], and/or are zoned for 1-3 family housing. The negative number for the Upper East Side-Carnegie Hill NTA speaks to the circumstances that in some neighborhoods developers and owners combine units to create larger or more usable physical spaces.

Table 8: Top Ten NTAs by Housing Production - 2010 to 2023

NTA Name	NTA Code	Housing Production 2010 - 2023	Rank
Long Island City-Hunters Point	QN0201	17,682	1
Williamsburg	BK0102	13,301	2
Downtown Brooklyn-DUMBO-Boerum Hill	BK0202	11,745	3
Chelsea-Hudson Yards	MN0401	10,458	4
Hell's Kitchen	MN0402	8,703	5
Greenpoint	BK0101	6,389	6
Bedford-Stuyvesant (West)	BK0301	6,274	7
Financial District-Battery Park City	MN0101	6,224	8
Mott Haven-Port Morris	BX0101	5,643	9
Jamaica	QN1201	5,238	10

Source: NYC DCP - Housing Database

Table 9: Bottom Ten NTAs by Housing Production - 2010 to 2023

NTA Name	NTA Code	Housing Production 2010 - 2023	Rank
Upper East Side-Carnegie Hill	MN0802	-223	1
West Village	MN0203	-2	2
Cambria Heights	QN1304	3	3
Glen Oaks-Floral Park-New Hyde Park	QN1301	11	4
Stuyvesant Town-Peter Cooper Village	MN0601	16	5
Gravesend (East)-Homecrest	BK1501	22	6
Marine Park-Mill Basin-Bergen Beach	BK1802	38	7
Oakwood-Richmondtown	SI0301	44	8
Woodhaven	QN0905	46	9
Manhattanville-West Harlem	MN0902	51	10

Source: NYC DCP - Housing Database

Top ten NTAs for housing units produced per capita are as follows in Table 10. The typology of these NTAs are a mix of historic neighborhoods with existing affordable housing in the form of rent-stabilized buildings (e.g. Jamaica, Brownsville), as well as NTAs with large-scale new construction projects (e.g. Long Island City-Hunters Point, Downtown Brooklyn-DUMBO-Boerum Hill). Although these NTAs represent the top-performers in housing production, most only produce 0.04 - 0.10 units per resident[9].

[9] For a comparison of housing production per resident, see the discussion of permits issued per capita in Supply Change Over Time on p. 7.

Table 10: Top Ten NTAs by Residential Units Produced per Capita

NTA Name	NTA Code	Housing Units Produced per Capita	Rank
Spring Creek-Starrett City	BK0504	0.16	1
Long Island City-Hunters Point	QN0201	0.10	2
West Farms	BX0601	0.10	3
Greenpoint	BK0101	0.06	4
Jamaica	QN1201	0.05	5
Morrisania	BX0301	0.05	6
Brownsville	BK1602	0.05	7
Mott Haven-Port Morris	BX0101	0.04	8
Downtown Brooklyn-DUMBO-Boerum Hill	BK0202	0.04	9
Old Astoria-Hallets Point	QN0102	0.04	10

Source: NYC DCP - Housing Database | 2020 Decennial Census

E. HOUSING DEMAND BY NTA

The following section of the market analysis examines current indicators of housing demand in New York City to offer a snapshot of where demand across NTAs currently stands. Specifically, this analysis focuses on understanding **sales pricing and market rents (pricing signals)** as the key drivers of demand and, ultimately, produces an aggregate price signal indicator, or Housing Price Index (HPI), that is used to rank NTAs by quintiles, based on their relative levels of market demand.

Housing Demand Database

As part of the housing demand analysis, a housing demand database was created with the most current information for the entire city at the NTA level. This database includes information on price signals (including sales pricing and market rent for condo and single-family homes), as well as other ancillary and descriptive metrics such as population, median household income, and average and median household size.

Price signal information was obtained primarily from the New York City Department of Finance (NYCDOF) Rolling Sales data and complemented with additional sources, including market and assessed valuation data from NYCDOF and supplementary data from Moody's REIS and the U.S. Census Bureau American Community Survey (ACS). All indicators were placed into a large flat file and all observations geocoded, enabling the ability to sort at city, borough, and NTA levels. Price information, in some cases presented in terms of per square foot, was aggregated into median price points within NTAs. In the case of price signals, buildings with rent controlled and stabilized units were omitted to ensure that rent regulations do not skew market statistics. Data on population and other contextual indicators were obtained from the U.S. Census Bureau American Community Survey (ACS), NYC Primary Land Use Tax Lot Output (PLUTO) data, and other publicly available sources, as needed.

The housing market study did not seek to provide a citywide analysis of price signals. Rather, this study produced relevant price signals at the NTA level and used them to compare the different NTAs based on those price signals. Nonetheless, in an effort to contextualize the price signals, the following table shows a price signal summary citywide and by borough: (1) median price per square foot (PSF) for 1-3 family homes - NYCDOF Rolling Sales; (2) median price PSF for condos - NYCDOF Rolling Sales; (3) median asking rent - Moody's REIS; and median self-reported contract rent PSF - US Census Bureau ACS.

Table 11. Median Price Signals by Geographic Unit

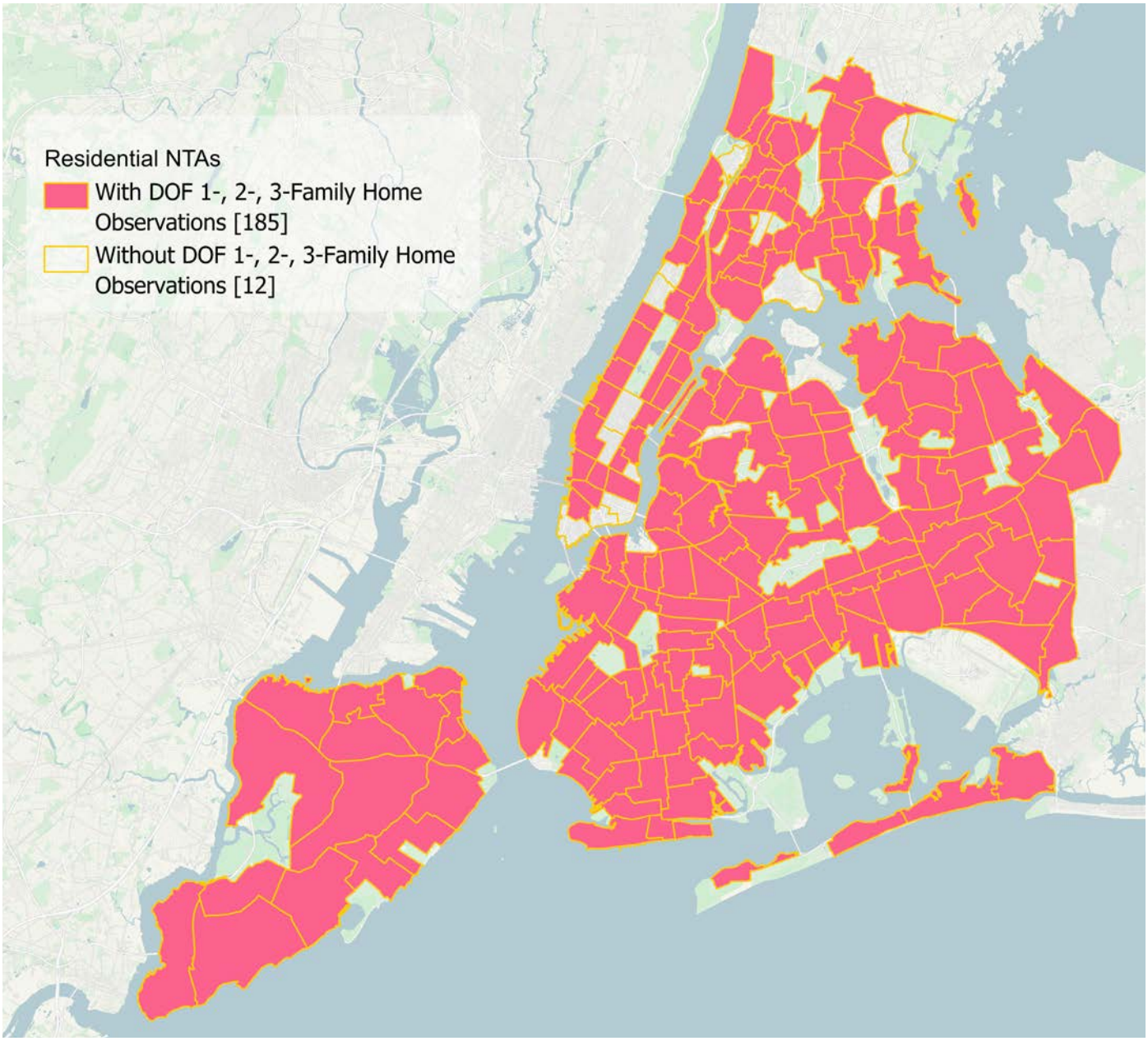
Geography	Median Price PSF 1-3 Family Homes (NYCDOF)	Median Price PSF Condominiums (NYCDOF)	Median Asking Rent (Moody's REIS)	Median Contract Rent PSF - 1-3 Family Homes (Census Bureau ACS)
NYC	$482.84	$1,215.69	$1,494.00	$3.94
Bronx	$349.81	$316.74	$1,231.50	$3.16
Brooklyn	$547.11	$1,082.13	$1,452.00	$3.22
Manhattan	$1,418.90	$1,582.14	$1,931.00	$5.25
Queens	$522.68	$847.91	$1,617.00	$3.98
Staten Island	$427.78	$385.00	$1,394.00	N/A

Source: U.S. Census Bureau ACS 5-Yr 2017-2021 Estimates | Moody's Analytics REIS - 2023 Residential Rental Observations with Price per Square Footage Data | NYC DOF - Rolling Sales Database 2022

Data Limitations

Our methodology relies on three key sources of data for price signals: NYCDOF Rolling Sales, Moody's REIS, and the U.S. Census Bureau ACS. The quality and coverage of the data by NTA, however, varied by source. While the NYCDOF Rolling Sales is the most reliable in terms of sample size (21,727 observations for single-family homes and 15,294 observations for condos) and accuracy, it does not have complete coverage for all NTAs (186 NTAs for single-family homes, or 94 percent of relevant NTAs, and 163 observations for condos, or 83 percent of relevant NTAs). It also only includes sales data, no rental price signals.

Figure 6: Map of NTAs with DOF Rolling Sales 2022 Reported Single Family Home Sales

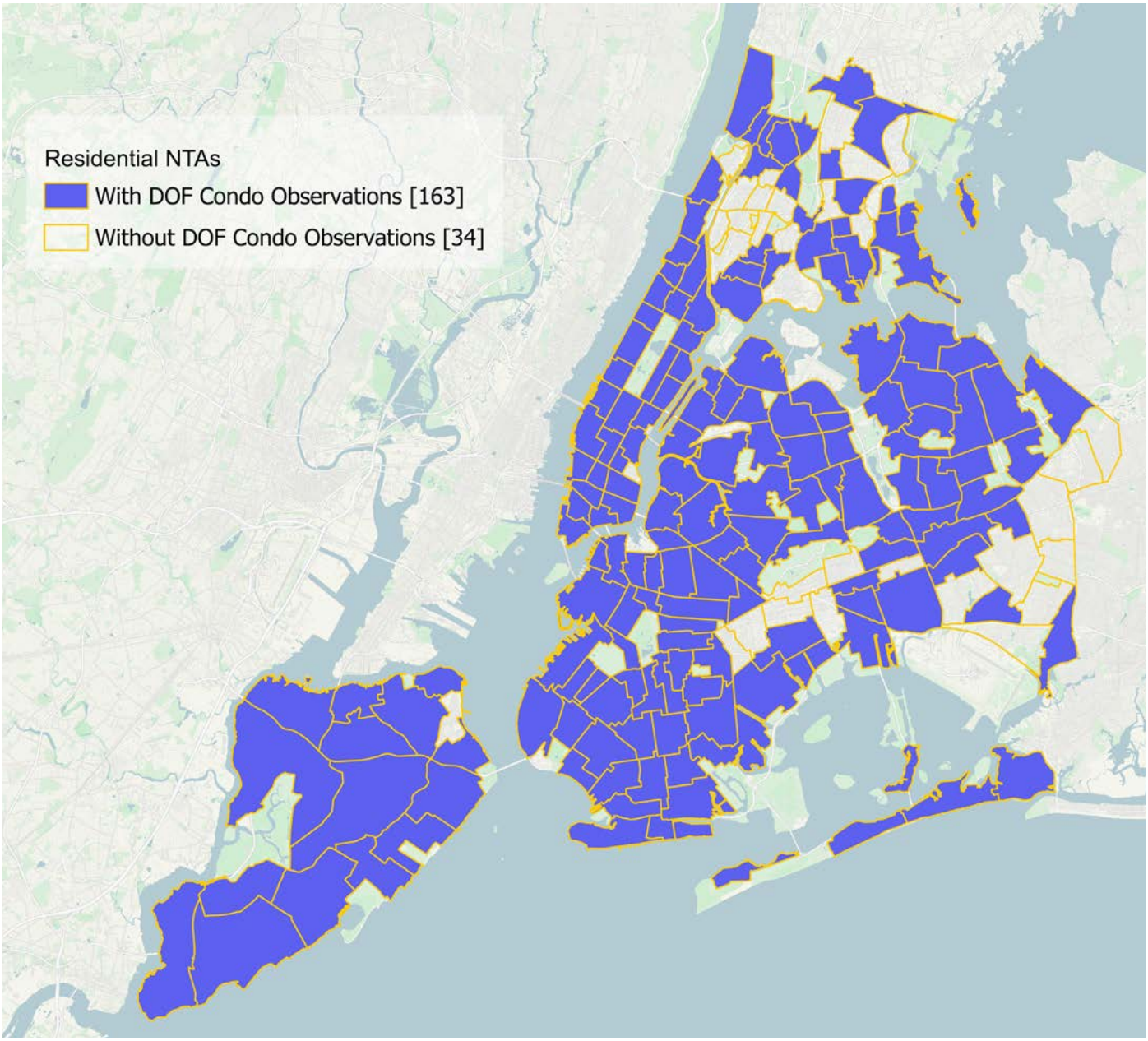


Source: NYC DCP - 2020 Neighborhood Tabulation Areas | NYC DOF - Rolling Sales Database 2022

Moody's REIS, on the other hand, does not have sales data, only market rental price signals, and its coverage is limited (3,361 observations across 113 NTAs, or 57% of relevant NTAs, with no data for Staten Island). It should also be noted that the data from Moody's REIS also skews towards larger buildings with relatively small apartments, so it may not be representative for lower-density markets. The Moody's REIS data utilized in this analysis consists of a weighted average of the asking rent by apartment type (studio, 1 BR, 2 BR, etc.) weighted by the number of apartments from each type in a given building. From these weighted averages, medians were produced by NTA.

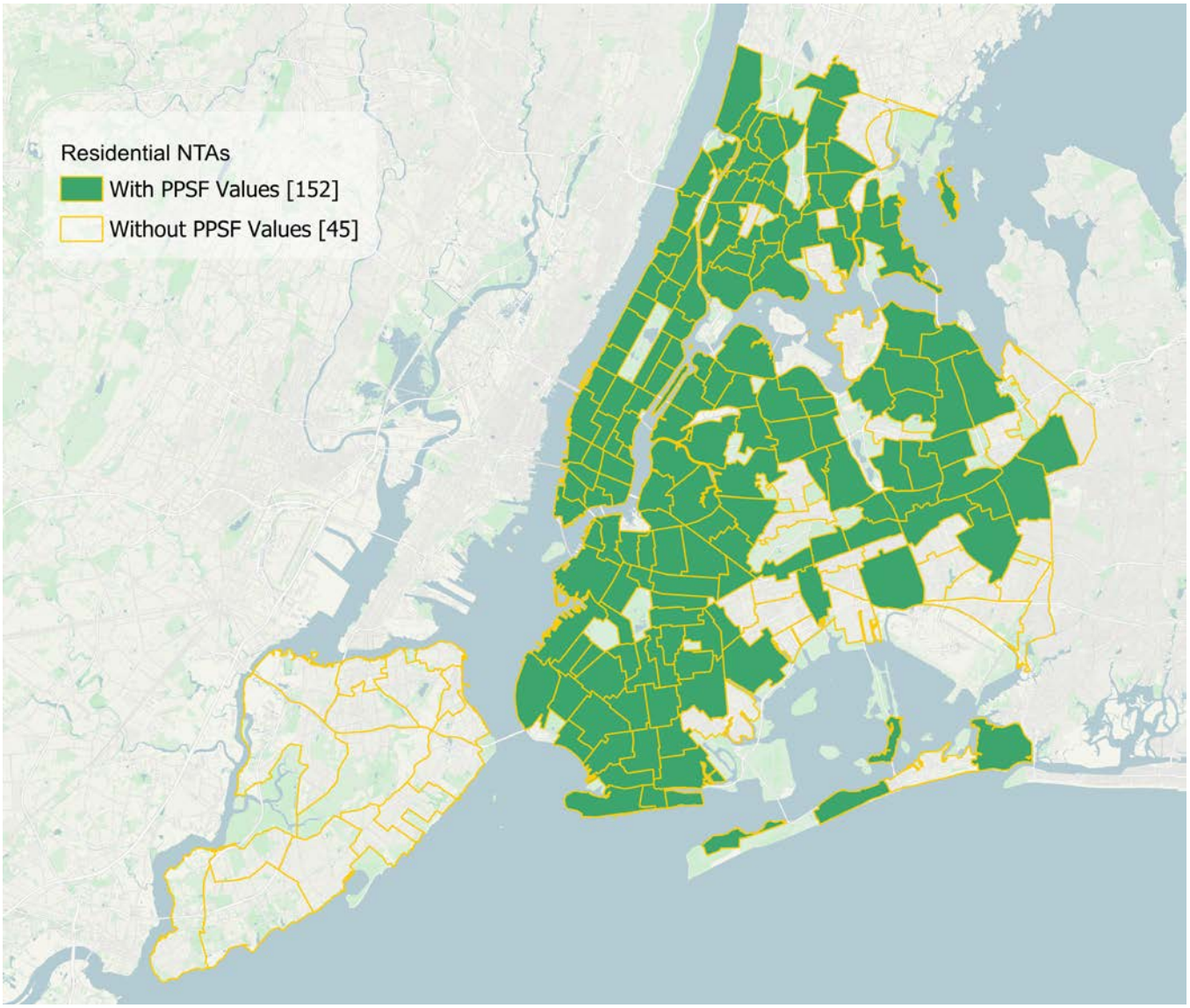
Finally, while the Census Bureau data has universal coverage for all NTAs (2,046 observations across 197 NTAs, or 100% of relevant NTAs), its data is likely the least accurate of the three given its reliance on self-reporting contract rents. Additionally, the Census Bureau data only includes self-reported median contract rent price signals and does not differentiate between different types of residences: apartments versus single-family homes.

Figure 7: Map of NTAs with DOF Rolling Sales 2022 Reported Condo Sales



Source: NYC DCP - 2020 Neighborhood Tabulation Areas | NYC DOF - Rolling Sales Database 2022

Figure 8: Map of NTAs with REIS-Reported Rental Price per Square Foot Values



Source: NYC DCP - 2020 Neighborhood Tabulation Areas | Moody's Analytics REIS - 2023 Residential Rental Observations with Price per Square Footage Data

The table below summarizes the price signal, the data source, the number of observations, and the NTAs covered (by number and percent of total residential NTAs).

Table 12: Sample and Coverage by Data Source

Price Signal (Source)	Observations	NTAs Covered	Percent of NTAs Covered
Rolling Sales - 1-3 Family Homes (NYCDOF)	21,727	186	94%
Rolling Sales - Condominiums (NYCDOF)	15,294	163	83%
Asking Rent (Moody's REIS)	3,361	113	57%
Self-Reported Contract Rent (US Census Bureau ACS)	2,046	197	100%

Source: U.S. Census Bureau ACS 5-Yr 2017-2021 Estimates | Moody's Analytics REIS - 2023 Residential Rental Observations with Price per Square Footage Data | NYC DOF - Rolling Sales Database 2022

Methodology

The main component of the housing demand analysis consisted of ranking NTAs by quintiles based on price signals, the key indicators of demand in this analysis, to obtain a sense of the relative market dynamism of each NTA. This information, which was subsequently used for other modeling components of the study, was produced using the latest available year for each indicator. Ancillary data on population and other indicators were also collected to facilitate contextual analyses. The following steps were carried out to achieve the ranking of NTAs by price signals.

01 step — Characterize NTAs by dwelling typology composition.

Because each NTA is different in terms of its residential housing make-up, the first step in the analysis was to understand what is the composition of each NTA by housing tenure and dwelling type. For the purposes of this classification, the following dwelling typologies were employed:

1. Owner-occupied 1-3 family homes
2. Rental 1-3 family homes
3. Owner-occupied apartments (condominiums)
4. Rental apartments

The percentage of each typology within each NTA was calculated to create a characterization of the NTAs by dwelling typology and to facilitate subsequent steps. As a result, for each NTA an assessment was obtained of what percentage of all dwellings within each NTA fall into each one of the four dwelling typologies above. For context, the distribution of typologies by geographic unit within NYC is provided in the table below.

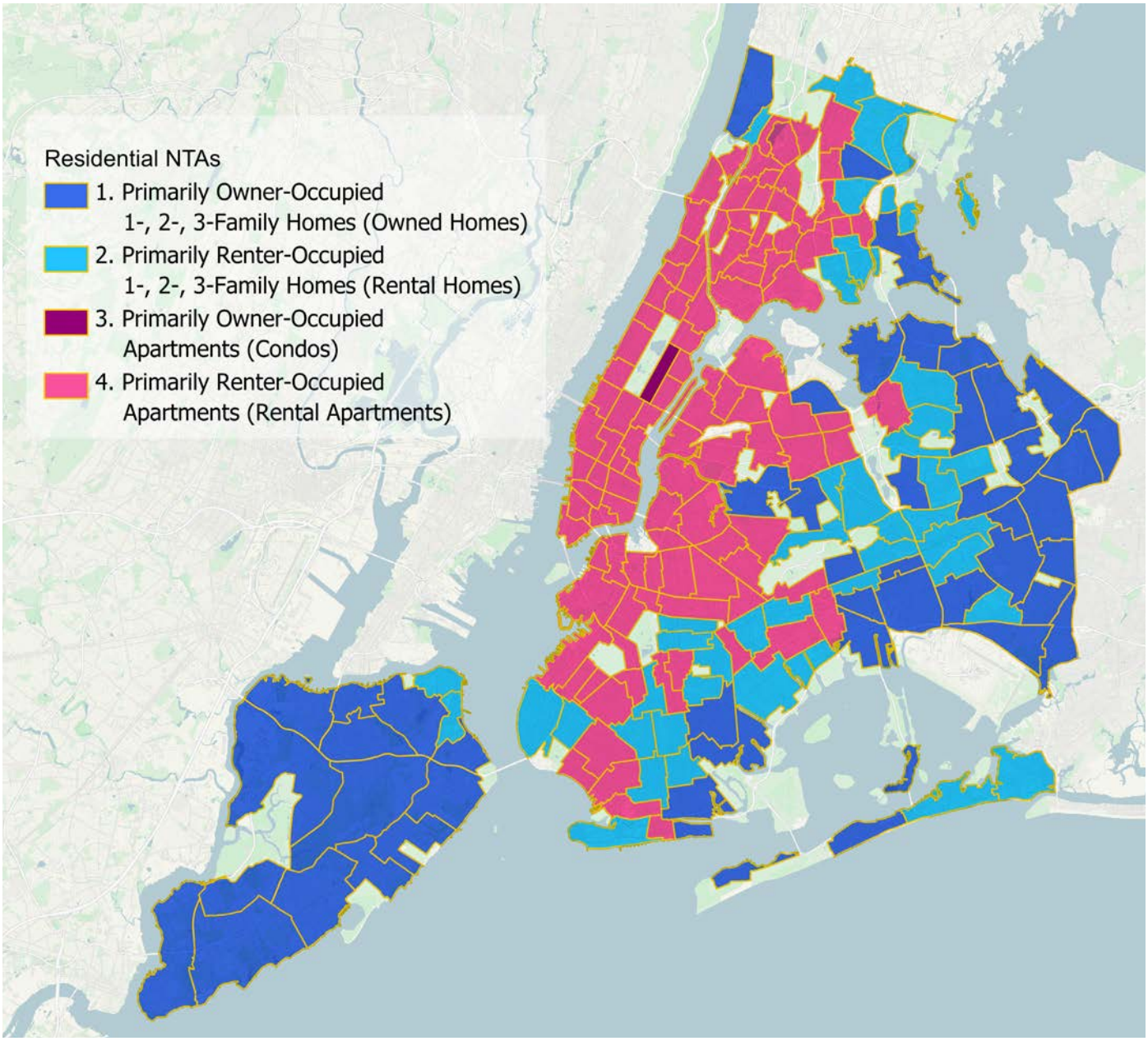
Table 13: Typology Distribution by Geographic Unit

Geography	Owner-Occupied 1-3 Family Homes	Rental 1-3 Family Homes	Condominiums	Rental Apartments
NYC	22.42%	45.21%	10.76%	21.70%
The Bronx	9.81%	39.91%	9.93%	40.40%
Brooklyn	14.60%	32.95%	16.10%	36.36%
Manhattan	2.31%	7.03%	22.64%	68.83%
Queens	36.40%	43.79%	9.02%	10.86%
Staten Island	67.15%	30.62%	1.58%	0.72%

Source: NYC DCP - 2020 Neighborhood Tabulation Areas | U.S. Census Bureau ACS 5-Yr 2017-2021 Estimates - DP04: Selected Housing Characteristics, B25003: Tenure

The following map shows NTAs by their primary resulting typologies. Most of Manhattan, Southwestern Bronx, Northwestern Queens, and Northern Brooklyn consist of NTAs in which dwellings are primarily renter-occupied apartments. Most of Staten Island, Eastern Queens, and Southeastern Brooklyn consist of NTAs in which dwellings are primarily owner-occupied one through three-family homes, whereas renter-occupied one through three-family homes are most prevalent in NTAs in Eastern Bronx, Central Queens, and Southern Brooklyn. Only one NTA of the 197, the Upper East Side-Carnegie Hill in Manhattan, comprises primarily dwellings that are owner-occupied apartments, or condominiums.

Figure 9: NTAs by Tenure and Primary Building Type



Source: NYC DCP - 2020 Neighborhood Tabulation Areas | U.S. Census Bureau ACS 5-Yr 2017-2021 Estimates - DP04: Selected Housing Characteristics, B25003: Tenure

02 step — Create price signals by NTA and match the best available indicator with dwelling typologies.

Subsequently, for each NTA, a series of price signals were produced using all available indicators. It should be noted that because coverage across price signal indicators was not universal across NTAs, not all NTAs obtained values for all four price signal indicators initially:

(A) NYCDOF Rolling Sales for 1-3 family homes for 2022

(B) NYCDOF Rolling Sales for condominiums for 2022

(C) Moody's REIS median asking rent per SF for September 2023

(D) Census Bureau ACS self-reported median contract rent in 2021

After price signals were produced for each NTA, each dwelling type (1-4) was matched with its best available price signal (A-D), given which data within each price signal was most relevant for that dwelling typology. From this exercise resulted the following pairs:

- Owner-occupied 1-3 family homes: NYCDOF Rolling Sales for 1-3 family homes (1-A)
- Rental 1-3 family homes: Census Bureau ACS self-reported contract rent (2-B)
- Owner-occupied apartments (condominiums): NYCDOF Rolling Sales for condominiums (3-C)
- Rental apartments: Moody's REIS asking rent (4-D)

03 step — Clean data, eliminate outliers, and add imputed values.

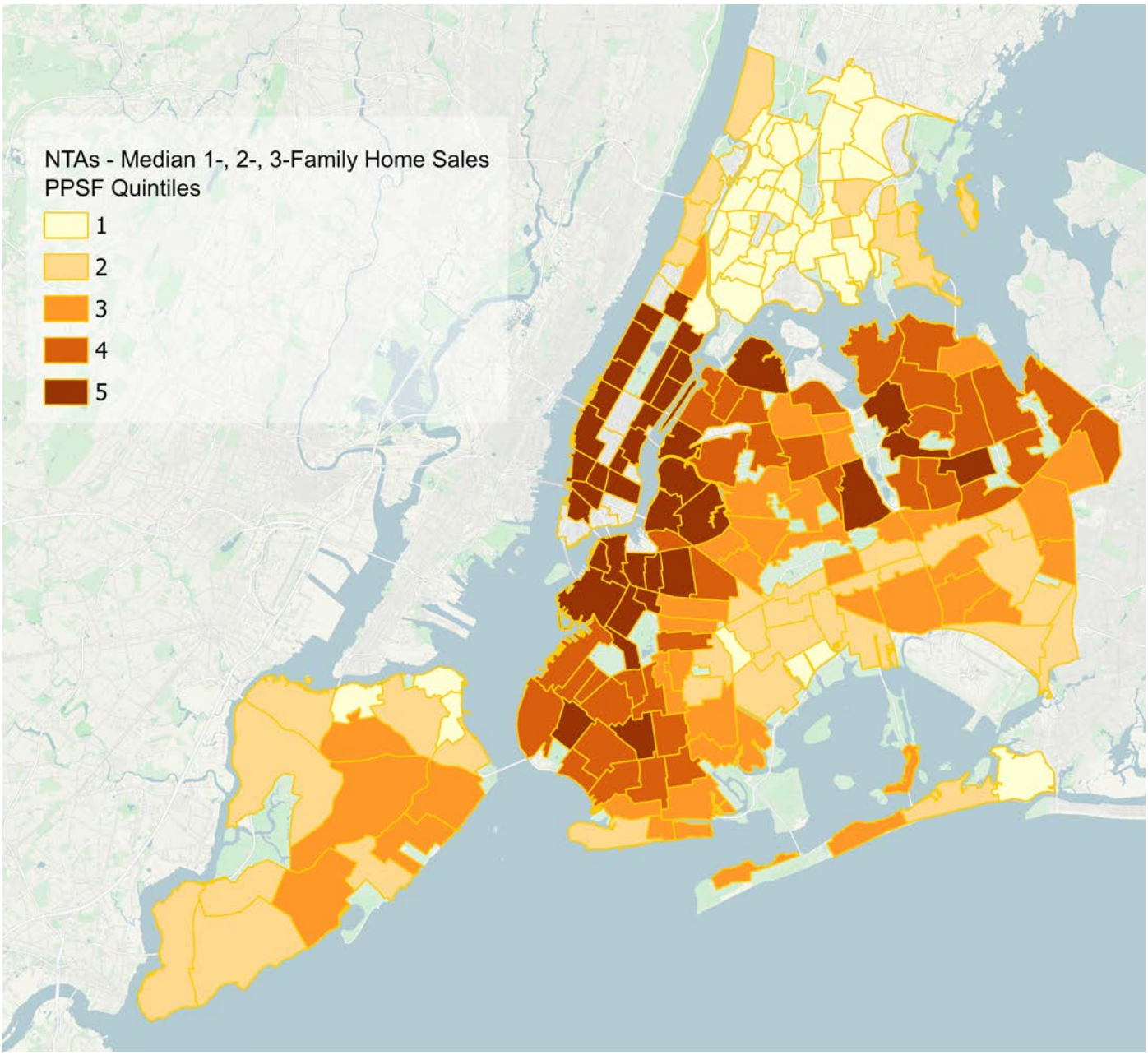
Because the quality and coverage of the data varied by indicator, all indicators were cleaned and outliers were eliminated. As part of the data cleaning process, in the case of housing sales, all NYCDOF sales records with values of $0 and which had zero residential units were eliminated, as well as any sales recording an area with fewer than 300 SF. Additionally, values for NTAs with fewer than 10 observations were excluded. All data was also cross-referenced to ensure the sales included in the calculations were not part of a rent-controlled/rent-stabilized building.

To eliminate outliers, the interquartile range (IQR) method was used, which calculates and eliminates anything below the lower limit (p25-1.5*IQR) and above the upper limit (p75+1.5*IQR). In the case of the lower limit, whichever was highest, the lower limit or $100 PSF, was used, meaning that $100 PSF was a hard cutoff. To carry out the IQR, an advanced clustering technique that took into account NTA location and 2022 price PSF was performed. This means that neighborhoods were clustered by proximity and by similarity in terms of price PSF values.

Additionally, a backup approach that employed imputed values was utilized for all indicators when the best indicator was not available for a given typology in a given NTA. For NTAs for which a given indicator was not available, after having cleaned the data for outliers, imputed values were created for the missing indicators based on the averages from the remaining indicators for a given NTA. This allowed the analysis to ultimately include price signal indicators for all key indicators for all NTAs. A thorough review of this process was carried out to ensure that backup indicators were relevant substitutes.

The following maps show the individual price signal indicators that were produced and the resulting NTA quintile rankings for each price signal. NTAs without a quintile value either had no observations for the relevant indicator, or had values that were eliminated during the data-cleaning process. The first map shows the results from the first price signal: median 1-3 family home sales price per square foot, based on NYCDOF rolling sales. On this map, we can see that the strongest markets based on this price signal are in NTAs located in Manhattan, Western Queens and Northwestern Brooklyn, and a few NTAs in Northern Queens and Central Brooklyn. NTAs across Southern Queens, Eastern Brooklyn, and Staten Island are relatively weaker, while the weakest were found in parts of Staten Island, Southern Queens, and The Bronx.

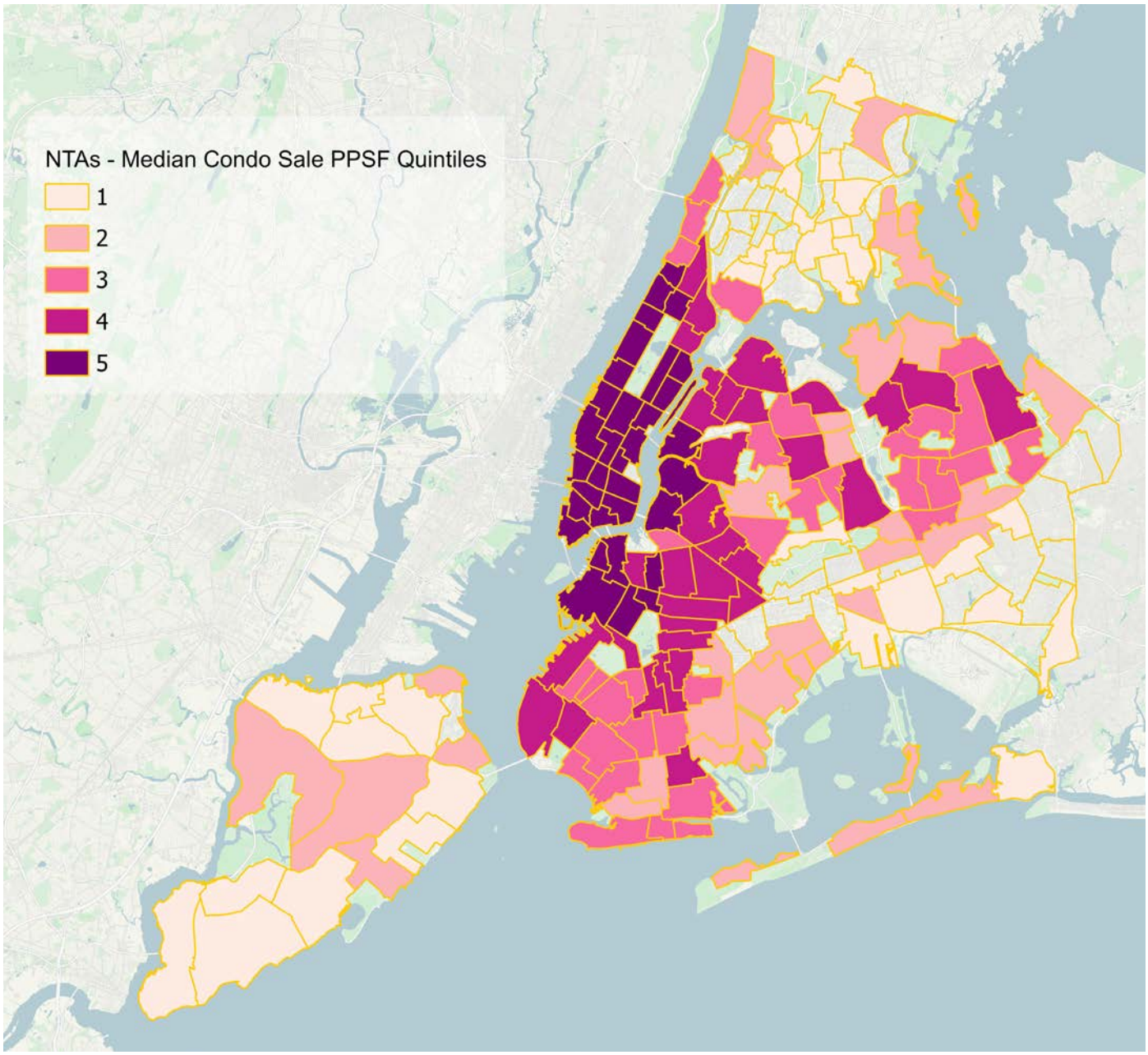
Figure 10: Map of NTAs by Median Single Family Home Sales Prices per Square Foot



Source: NYC DCP - 2020 Neighborhood Tabulation Areas | U.S. Census Bureau ACS 5-Yr 2017-2021 Estimates - DP04: Selected Housing Characteristics, B25003: Tenure

The second map shows the results from the second price signal: median condo sales price per square foot, based on NYCDOF rolling sales. On this map, we can see that the strongest markets based on this price signal are in NTAs located in Manhattan, Western Queens, and Northwestern Brooklyn. NTAs across Northern Queens, Southern Brooklyn, as well as Central Staten Island are relatively weaker, while the weakest were found in parts of Northern and Southern Staten Island, Southeastern Queens, and The Bronx.

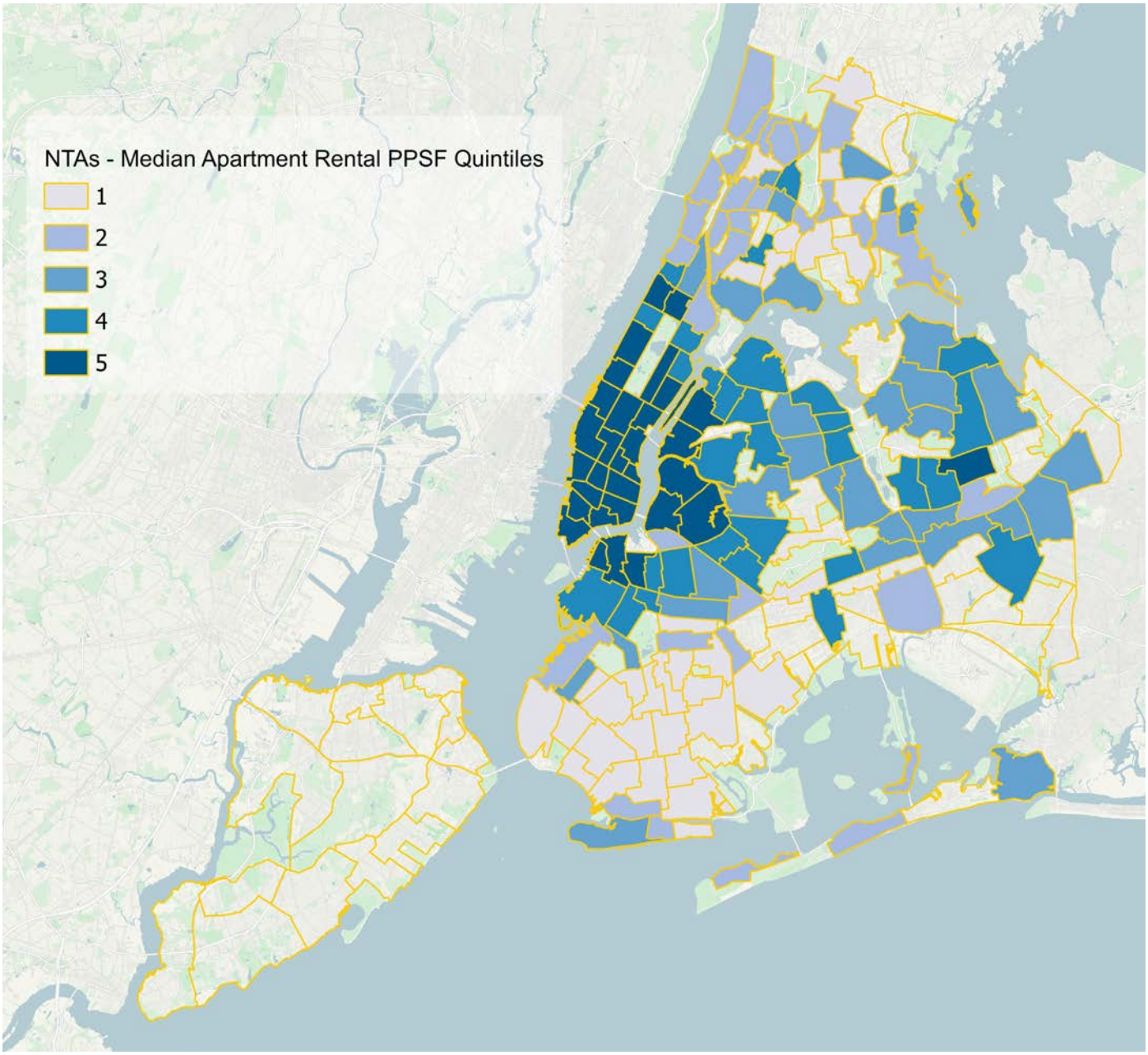
Figure 11: Map of NTAs by Median Condo Sale Prices per Square Foot



Source: NYC DCP - 2020 Neighborhood Tabulation Areas | NYC DOF - Rolling Sales Database 2022

The third map shows the results from the third price signal: median asking rent, based on data from Moody's REIS. On this map, we can see that the strongest markets based on this price signal are in NTAs located in Manhattan, Western Queens, and Northwestern Brooklyn. NTAs across Northern Queens and Northern Brooklyn are relatively weaker, while the weakest were found in parts of Southern Brooklyn and The Bronx. This indicator has no data for Staten Island.

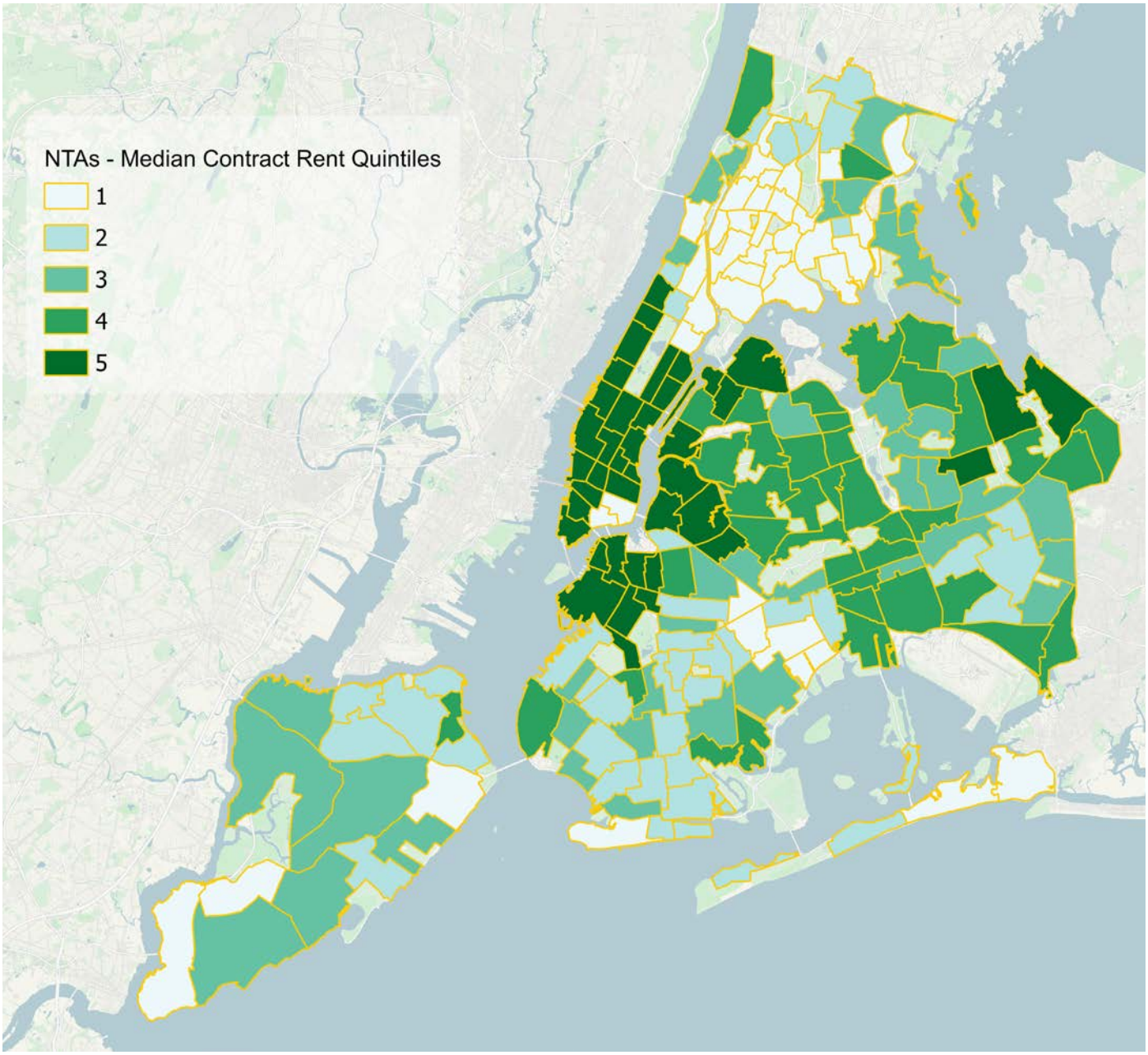
Figure 12: Map of NTAs by Median Apartment Rental Prices per Square Foot



Source: NYC DCP - 2020 Neighborhood Tabulation Areas | Moody's Analytics REIS - 2023 Residential Rental Observations with Price per Square Footage Data

Finally, the fourth map shows the results from the fourth price signal: median self-reported contract rent, based on data from the U.S. Census Bureau ACS. On this map, we can see that the strongest markets based on this price signal are in NTAs located in Manhattan, Western and Northeastern Queens, and Northwestern Brooklyn. NTAs across Northern and Southern Queens, Southern Brooklyn, and Staten Island are relatively weaker, while the weakest were found mostly in The Bronx.

Figure 13: Map of NTAs by Median Self-Reported Contract Rents



Source: NYC DCP - 2020 Neighborhood Tabulation Areas | U.S. Census Bureau ACS 5-Yr 2017-2021 Estimates - B25058: Median Contract Rent

04 step — Consolidate into a single composite indicator to simplify subsequent analyses.

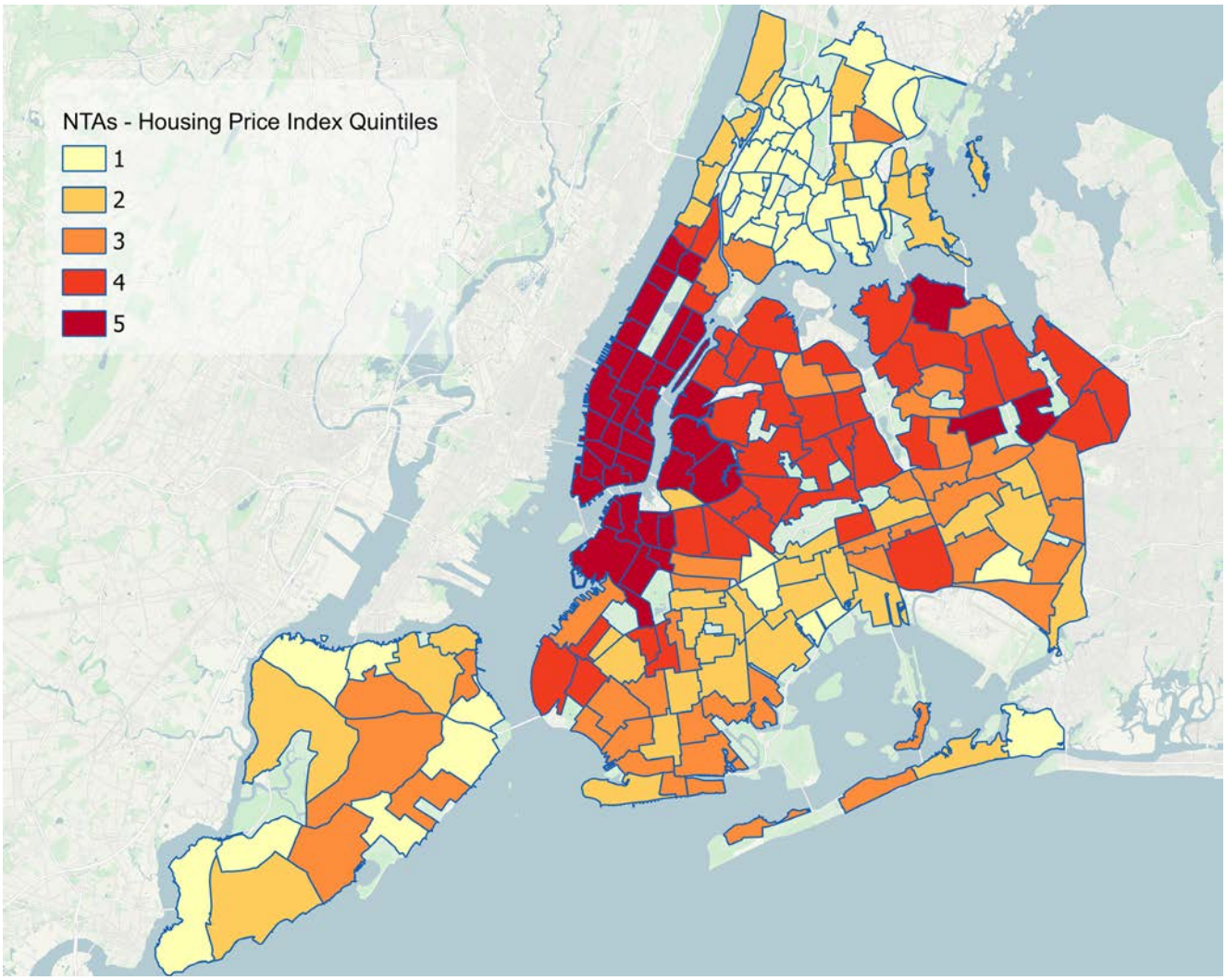
With the new typologies and vetted data for all indicators, weighted averages for each NTA were created, based on the proportions of each typology within every NTA and the percentile rankings for each individual indicator for a given NTA. These weighted averages were then reranked to create a composite percentile ranking that was then used for producing the quintiles.

05 step — Produce quintile rankings.

Ultimately, a single, aggregate price signal indicator, or Housing Price Index (HPI), was produced for each NTA that acknowledges the dwelling diversity and complexity within each NTA, matching housing typologies to the best available indicator, and eliminating noise to the extent that was possible.

The resulting HPI shows that the strongest markets based on these price signals are in NTAs located in Manhattan, Western Queens, and Northwestern Brooklyn, the latter two both along the East River and directly across from Manhattan. Other relatively strong markets are located in NTAs across Northern Queens, which is particularly interesting given their relatively weak transit connections. NTAs across Southern Brooklyn, Southern Queens, and Staten Island are relatively weaker, while the weakest were found in parts of Staten Island, Southeastern Queens, and The Bronx. The results from the HPI ranking can be seen in the following map.

Figure 14: Map of NTAs by Housing Price Index Quintiles



Source: NYC DCP - 2020 Neighborhood Tabulation Areas | U.S. Census Bureau ACS 5-Yr 2017-2021 Estimates - B25058: Median Contract Rent | Moody's Analytics REIS - 2023 Residential Rental Observations with Price per Square Footage Data | NYC DOF - Rolling Sales Database 2022

F. CONCLUSION

A citywide Housing Market Study was prepared to provide the Department of City Planning with a baseline understanding of market strength by Neighborhood Tabulation Area (NTA). The Housing Market Study consists of three primary components: a high-level Housing Market Overview, Housing Supply by NTA, and Housing Demand by NTA. The Housing Market Overview provides a summary of the current state of the New York City housing inventory, discussion of statistics that denote that the housing market is in a state of crisis that demands action and how the proposed City of Yes for Housing Opportunity is an appropriate response to this crisis, and consideration of select trends over the recent past. The Housing Supply by NTA section provides statistical analysis of the market when evaluated by NTA, and the Housing Demand by NTA section provides information on a series of screens of NTAs that were performed to stratify the NTAs into quintiles ranging from weakest markets to strongest markets based on pricing and related factors. Specifically, the NTA analysis focuses on understanding sales pricing and market rents (pricing signals) as the key drivers of demand and, ultimately, produces an aggregate price signal indicator, or Housing Price Index (HPI), that is used to rank NTAs by quintiles, based on their relative levels of market demand. NTA distribution by HPI presents the following findings:

- The strongest NTAs (fifth quintile) are generally clustered in the transit-rich areas of Manhattan, western Queens, and northern Brooklyn, with three fifth-quintile NTAs of generally 1-3 family and auto-oriented districts in eastern Queens.
- Brooklyn and Queens are comprised of all five quintiles, reflecting their diversity of housing typologies, socio-demographic characteristics, and varied transportation access modes from transit rich corridors to auto-oriented neighborhoods beyond the transit zone.
- Staten Island and the Bronx are comprised of the weaker through middle (first through third) quintiles.

APPENDIX: FACTORS AFFECTING SUPPLY OF HOUSING

The Housing Market Study focused on the price signal by NTA as a key component affecting housing production overall and in the various geographies of the city. However, there are numerous other factors, many of which impact the price signal, that determine the velocity, type, and geographic location of new housing deliveries. The following section provides a high level discussion of several of these forces. Major factors that affect housing production include the cost and availability of labor and building raw materials and components, the cost of capital, return expectations and risk tolerance of the development industry, organization of the development industry, tax and regulatory policy, zoning capacity, and competing uses.

Labor and Materials Costs

The construction and real estate development sectors are both large industries (combined 6 percent of New York City employment), with construction having 139,265 jobs and real estate having 130,620 jobs in February 2024.[10] However, throughout the late 2010s and the period during and after the COVID-19 Pandemic, shortages of labor and technical staff were widely reported across these sectors. A September 2023 national industry survey by Engineering News-Record found that 85 percent of respondent firms with open positions were having a "hard time" filling them and 68 percent of firms reported project delays due to staffing shortages. In New York City shortages impacting the industry - both through increased cost and limiting capacity - extend to professionals in the design, real estate, and finance sectors. The cost and availability of raw materials and building components were affected by COVID-related supply chain disruptions that have moderated, though New York City construction industry sources such as the Turner Building Cost Index still report elevated cost escalations (6.0% for 2023, down from 8.0% in 2022).

Cost of Land, Capital, Interest Rates

Housing construction is capital intensive and a long term investment for the developer/owner. Many factors play into housing cost but the national economic cycle, interest rates, and return requirements of varied market participants affect the feasibility of new development and thus the rate of production of new housing. The high cost of land has been a constant in New York City for decades and is affected by many of the other factors discussed below. Interest rates are a key factor and a period of historically low interest rates coincided with the expansion of New York City's housing production in the 2010s. Rising interest rates since 2022 have recently presented headwinds to the housing industry.

Return Requirements and the Organization of the Development Industry

Another significant financial factor is the return requirements and expectations of the varied industry participants. Small developers in the boroughs outside of Manhattan who typically undertake projects of 1-10 units at a time, sometimes who are also contractors, may have different return expectations or investment horizons than major developers and their institutional lenders and capital partners. There is no established definition of major developers but any list of the largest housing producers generally includes companies that sponsor projects greater than 100 units. An analysis of new housing production from 2003 to 2023 provides some insight into the relative contribution of small and large developers.[11] During this period overall housing production was divided in similar proportions between buildings with fewer than 100 units (54%) and those with 100 or more units (46%). However, in the NTAs with the highest unit production, and generally in the most expensive markets, the vast majority of unit production was in large buildings (100 or more units), for example, Downtown Brooklyn-DUMBO-Boerum Hill at 88 percent, Chelsea-Hudson Yards at 73 percent, Hell's Kitchen at 89 percent, and Long Island City-Hunters Point at 87 percent.

[10] Lightcast using U.S. Bureau of Labor Statistics Quarterly Census of Employment and Wages data.
[11] New residential buildings 2003-2023, PLUTO.

This pattern indicates that the largest developers are overwhelmingly dominating production in the highest cost and highest value areas of the city.

Examples of major developers include publicly traded real estate investment trusts which often operate nationally, the so-called "real estate families", and other privately held, often more opportunistic organizations that may invest in both housing and other real estate assets. Non-profit developers also play a significant role in the housing production market, some of which also provide social services and advocacy for their tenants and communities. Private equity firms and traditional investment banks also play a variety of roles in the industry as equity and debt sources and in some cases project sponsors. Regional banks, major construction lenders to both small developers and major ones, lend at different (often lower) interest rates than other market participants such as money center banks, private equity firms, and mezzanine lenders. Each of these groups and entities may have differing investment philosophies, ties to local communities, levels of capacity and risk tolerance, and investment horizons that determine how much new product they develop and where.

Risk Perceptions

Capital return expectations are also influenced by the risk tolerance and perceptions of risk by development actors and their opportunity cost. Reporting and conversations with developers indicate that New York City is perceived as a more risky market than it was prior to the passage of the 2019 rent reform laws (regulatory environment and perception of risk is further discussed below), and also that the industry sees greater investment opportunities in other parts of the country, particularly the South and West.

An illustrative example of how risk perception and opportunity cost can affect housing investment and production is found in recent investor presentations by the two largest publicly traded real estate investment trusts (REITs), AvalonBay Communities (90,000 apartments nationwide) and Equity Residential (80,000 apartments nationwide), both of which are participants in the New York City housing development and management sector. AvalonBay's 4Q 2023 Investor Teleconference Presentation[12] divides its national portfolio into Established Regions, including New York/ New Jersey, New England, Maryland/DC, California, and Washington and Expansion Regions comprising North Carolina, Florida, Texas, and Colorado. It goes on to explain that it will allocate new capital primarily to Expansion Regions which benefit from high population growth and that in 2023 all dispositions were in Established Regions while all acquisitions and new construction starts were in Expansion Regions. Equity Residential's 3Q 2023 Management Report likewise divides the nation into Established Markets primarily in the Northeast and West Coast and Expansion Markets in the South plus Colorado. Both firms were active developers in New York City in the 2010s, Avalon Bay for example completing the 632 unit Avalon Fort Greene in 2009 and the 994 unit Avalon Willoughby in 2014, but currently do not have any projects in construction here. The fact that two of the largest national public owners and developers of multifamily properties are allocating capital away from the northeast, including New York City, and toward the south and west is indicative of current industry perceptions of risk and investment return opportunity in New York City and similar markets.

Tax Policy and Regulatory Environment

Tax policy and the regulatory environment have a major impact on the production of new supply. Real property tax on residential buildings is one of the largest expense items and at full taxation can make new development infeasible. The regulatory environment includes multiple levels of governmental supervision of industry practices and the built environment, including through the state's Multiple Dwelling Law, Department of Buildings, landmarks and historic districts, and rent regulations.. Over the decades, many regulatory policies and programs have framed the City's response to housing needs, by enacting legislation and rules that improve safety, quality of life, economic stability, and fairness, and by creating tools to ameliorate notably high costs of production and land costs in New York City.

Several abatement and exemption programs, most notably 421-a and J-51, were created to provide an incentive structure to spur new development. Created in 1971, the 421-a program offered developers of newly constructed multi-family residential buildings a property tax exemption for the value of the building

[12] https://s1.q4cdn.com/777653952/files/doc_financials/2023/q3/Q3-2023-Teleconference-Presentation-FINAL.pdf

improvements. The program's goals were to stimulate the production of housing and to ensure that some portion of that housing is affordable to low- and moderate-income New Yorkers. The program, which had been renewed and amended several times over the course of the decades, expired in 2022 and has not been renewed. Up until it expired, there had been areas of the City – the Geographic Exclusion Areas – that were not eligible for 421-a benefits unless on-site affordable housing or Substantial Government Assistance (SGA) – defined as loans, grants, or other subsidies – were provided. For the other areas of the City, benefits were available for construction without affordability requirements. The affordability criteria varied depending on geography and over time as the program was amended. J-51 was a tax abatement policy for the renovation of buildings that provided an exemption on improvements for up to 34 years. Cooperative and condominium buildings, in addition to other multi-tenant buildings, were eligible for the benefits. Improvements must have been completed prior to June 29, 2022, as the program expired. Other real property tax abatement programs like Article XI are available for 100 percent affordable housing.

Zoning Capacity

Zoning is New York City's primary land use regulation tool. It both controls what can be built and where and also has a powerful impact on who can build. New York City has as-of-right zoning (unlike most other towns and cities in New York State and many national peers like Boston and San Francisco), meaning that most properties have rules that set out what kind and how much new development they are allowed without the need to go through a discretionary approval process. However, as housing demands grow and fewer straightforward development sites remain, as-of-right development options are increasingly limited. Zoning can be changed, at the district, neighborhood, or Citywide level through City-sponsored action or at the level of one or a few properties by privately-sponsored rezoning applications, through the Uniform Land Use Review Procedure (ULURP). As noted below, the City has engaged in a steady program of rezonings, as have private developers, but these efforts are slow, expensive, generally incremental at the scale of city-wide impact.

Zoning capacity is a major factor affecting the ability of the development sector to add to housing supply. The 1961 zoning resolution created three basic use groups (manufacturing, commercial, residential) with clear rules to separate and regulate both the uses of land and the density and other physical characteristics of development In particular, the dedication of large areas of the city to industrial uses and low-density residential uses under zoning imposed significant caps on available zoning capacity, especially away from the transit lines.

As the city rebounded from the de-industrialization and population loss of the 1970s it began to rezone areas to increase zoning capacity. By the early 2000s which saw strong population growth, the need to accommodate new housing in all five boroughs set the stage for a series of rezonings that added significant density to places like industrial districts, the city's waterfront, and transit rich nodes. A recent and powerful innovation was the Mandatory Inclusionary Housing (MIH) program adopted in 2016 which requires that future rezonings include provisions for the development of affordable housing. Since 2016, the City has focused zoning initiatives in areas where sufficient density could be added to require MIH, bringing an affordable housing requirement to medium and high density neighborhoods in almost every borough. Increased zoning capacity can be delivered by permitting "a little more housing in every neighborhood" and thereby facilitating overall growth in a more distributed way than has been historically allowed.

Competing Uses

Another factor that can affect the development of new housing is competing uses. New York City has an extremely robust economy with a dynamic commercial sector that also places demands on available land. Office, hotel, retail, entertainment, and institutional uses all competed with housing for available space. Another form of competition that is made visible in the Housing Supply by NTA section is the conversion of multi-family buildings into single family homes, combinations of units to create larger or more usable housing spaces, and the demolition of apartment buildings with numerous units, often relatively affordable tenements and older 4-6 story apartment buildings, to make way for luxury condominium towers with fewer units. For example both the Upper East Side-Carnegie Hill (-223 units) and West Village (-2 units) NTAs experienced negative housing production from 2010-2023 for this reason.