

TAXES AND TENURE

A SPATIAL ANALYSIS OF
REGRESSIVE PROPERTY
TAXES AND HOUSING COSTS
IN NEW YORK CITY

Jane Hutton

Geographic Information Systems
Jonathan Stiles
Fall 2024



TABLE OF CONTENTS

Introduction	3
Research Questions	5
Methodology	6
Tax Rate by Property Value	8
Tax Rate by Income	10
Assessing New York City	11
NYC by Race	13
NYC by Tenure	15
MCDA Analysis	19
Housing Cost Burden Vulnerability Index	21
Affordable Housing	23
Vulnerable Neighborhoods	25
Sources	27
Limitations	28

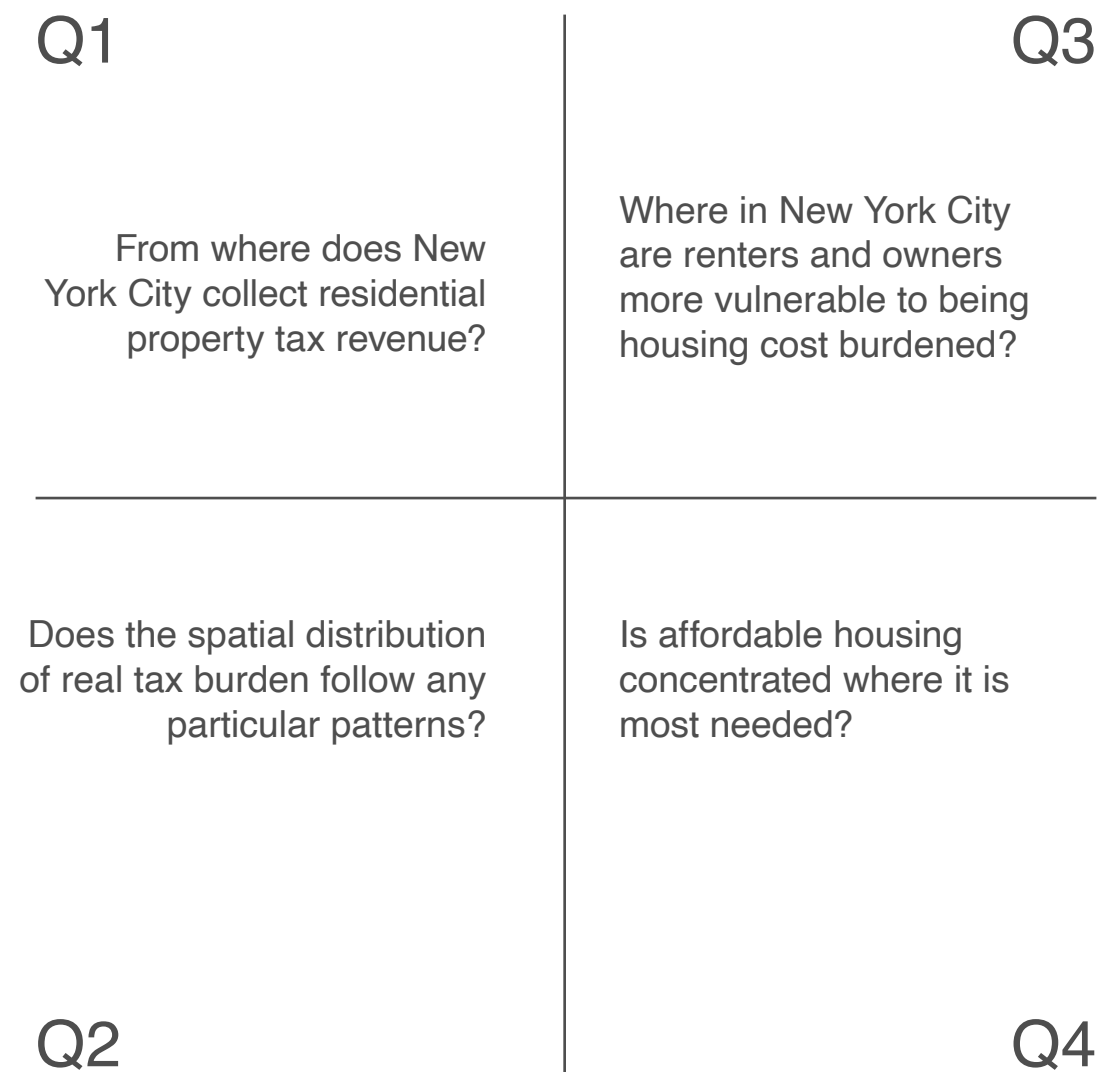
INTRODUCTION

The City of New York collects over \$30 billion in property tax revenue annually, making it the city's single largest revenue source at approximately 30% of the overall budget.

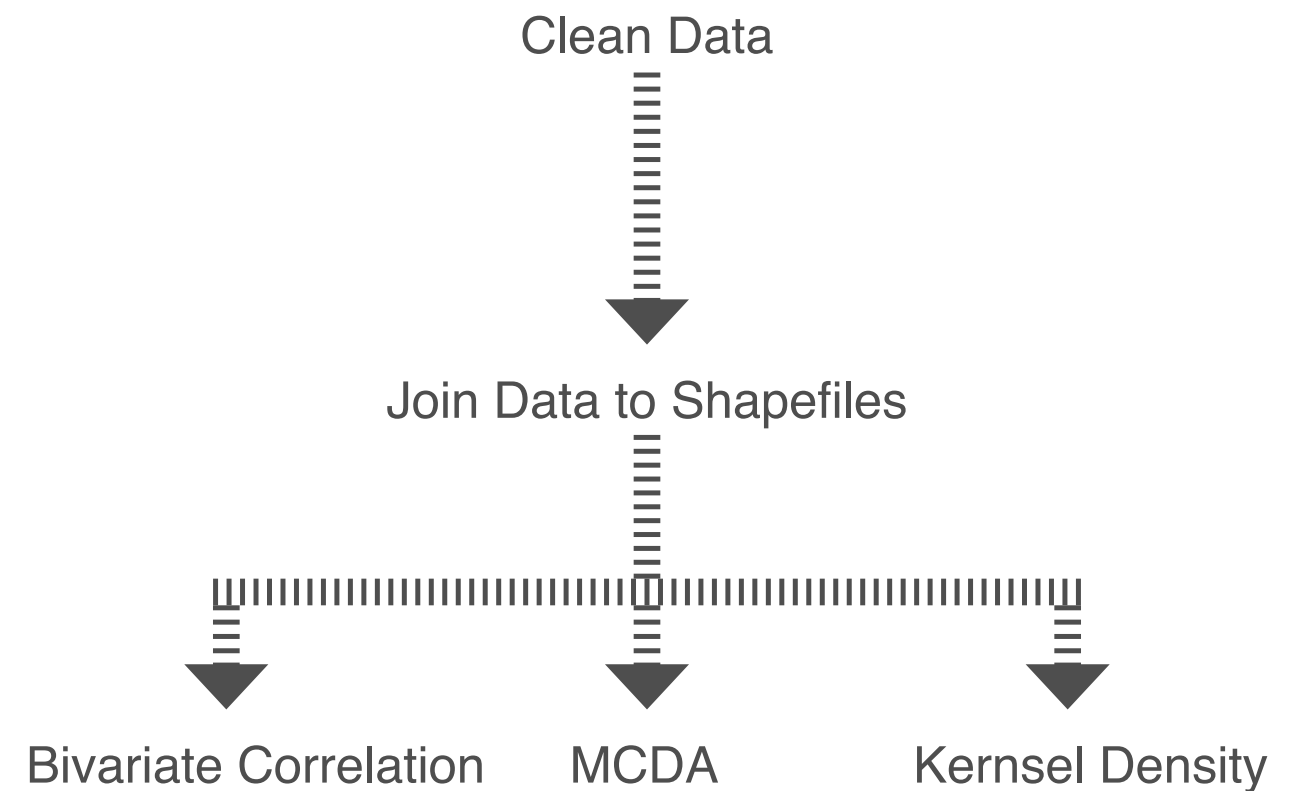
Earlier this year, the New York State Court of Appeals permitted a lawsuit to be brought against the city claiming the tax system violates federal Fair Housing law. Research by the coalition known as Tax Equity Now New York shows that these assessed value caps result in much higher tax rates for rental apartments than single-family homes, higher rates in lower-income and minority communities, and higher rates for less valuable properties than more valuable ones. This has insulated some homeowners from paying taxes that reflect their increasing home values, a benefit that does not extend to homeowners in slower growing markets, resulting in uneven tax rates relative to actual home value.



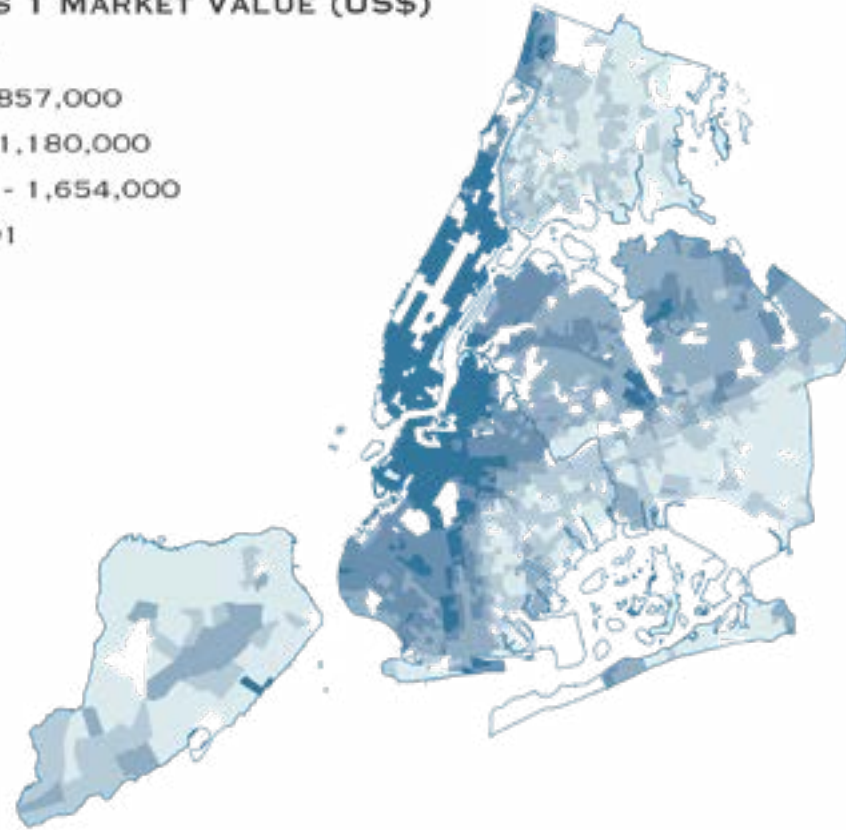
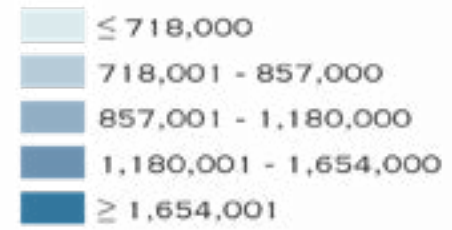
RESEARCH QUESTIONS



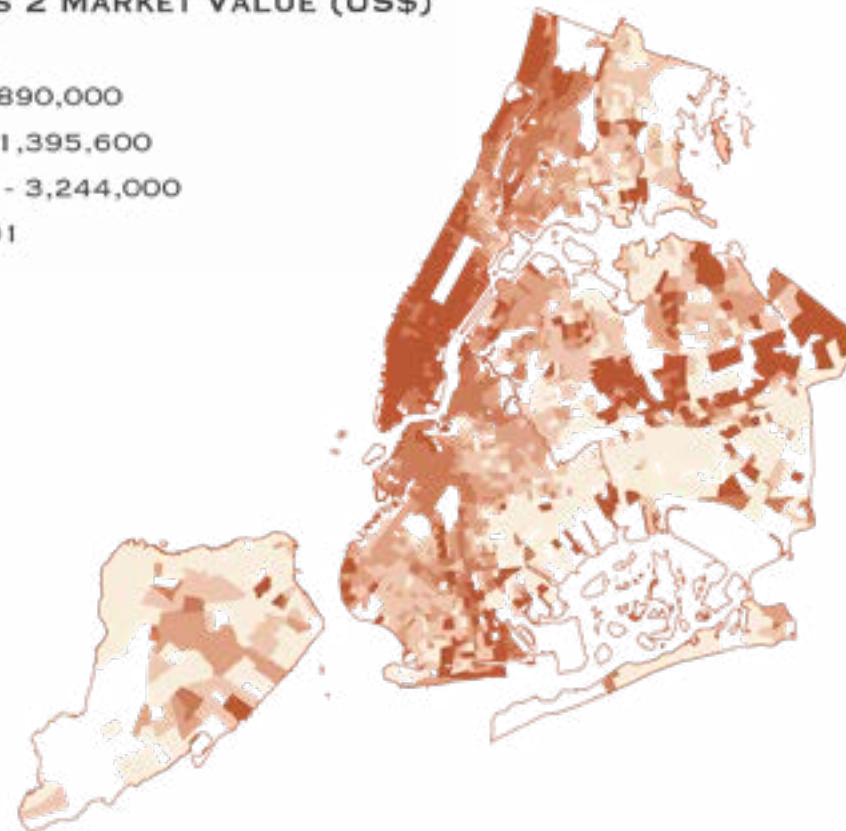
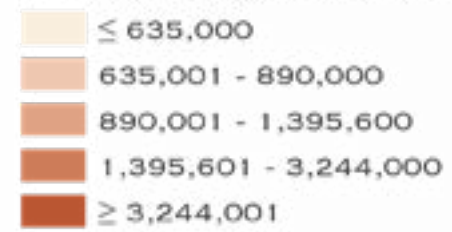
METHODOLOGY



MEDIAN CLASS 1 MARKET VALUE (US\$)



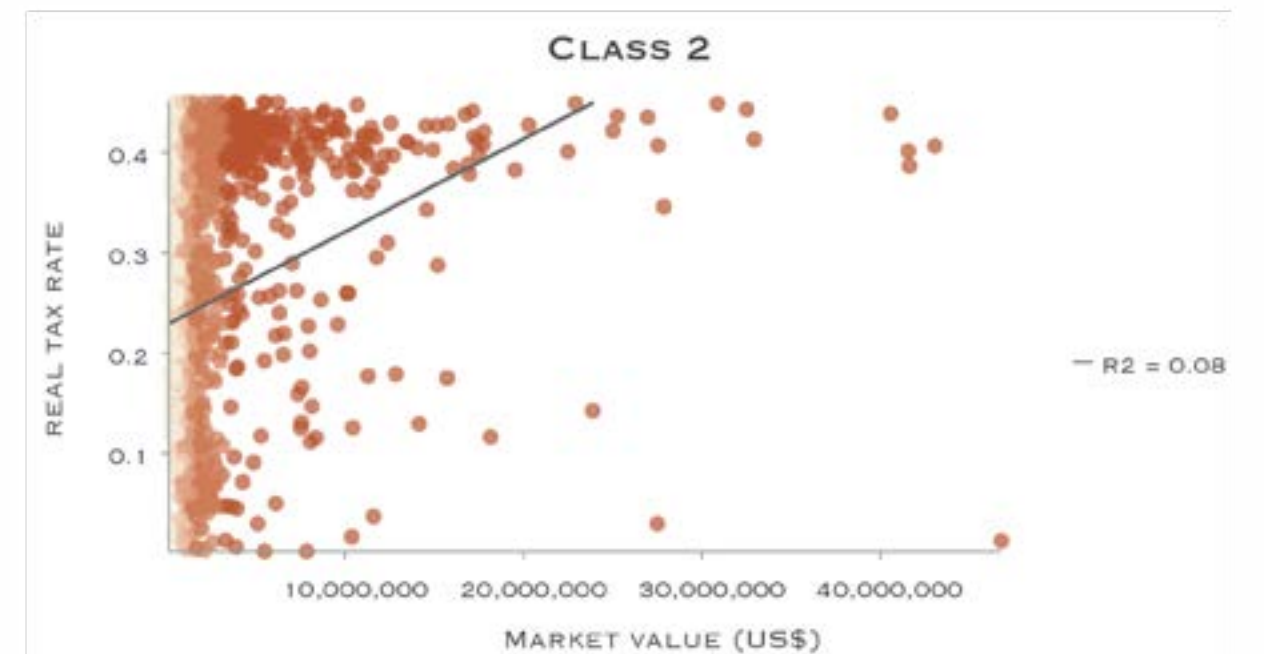
MEDIAN CLASS 2 MARKET VALUE (US\$)



SOURCE: ACS 2022, NYC OPENDATA

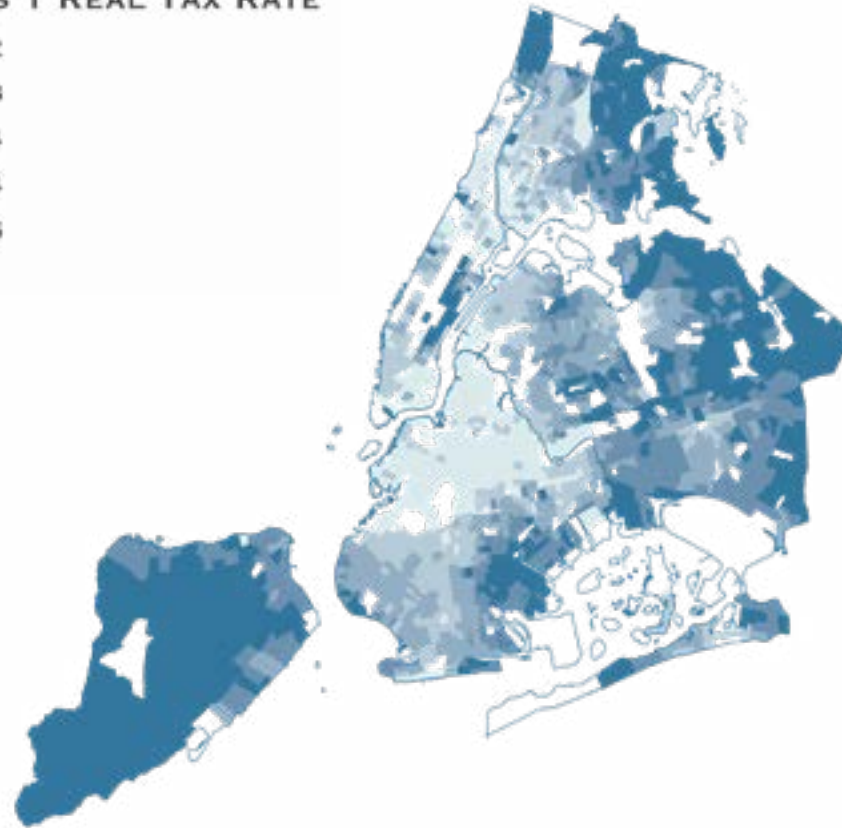
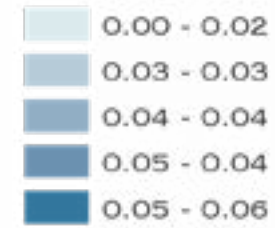


TAX RATE BY PROPERTY VALUE

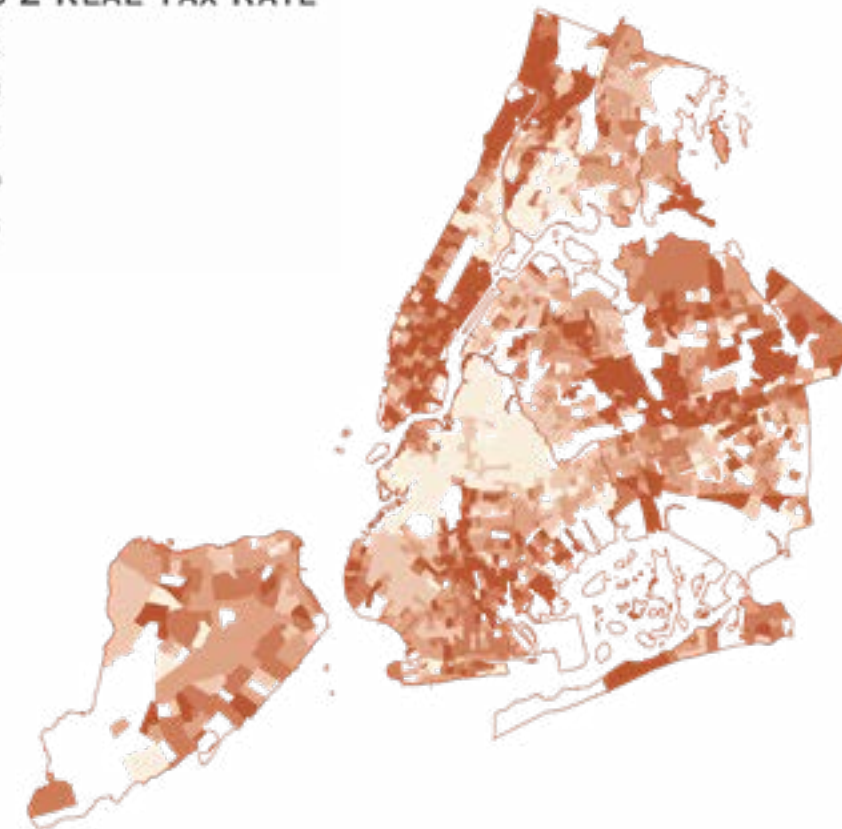
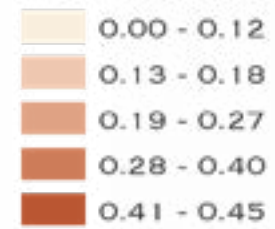


* Some data points excluded from plot for legibility

MEDIAN CLASS 1 REAL TAX RATE



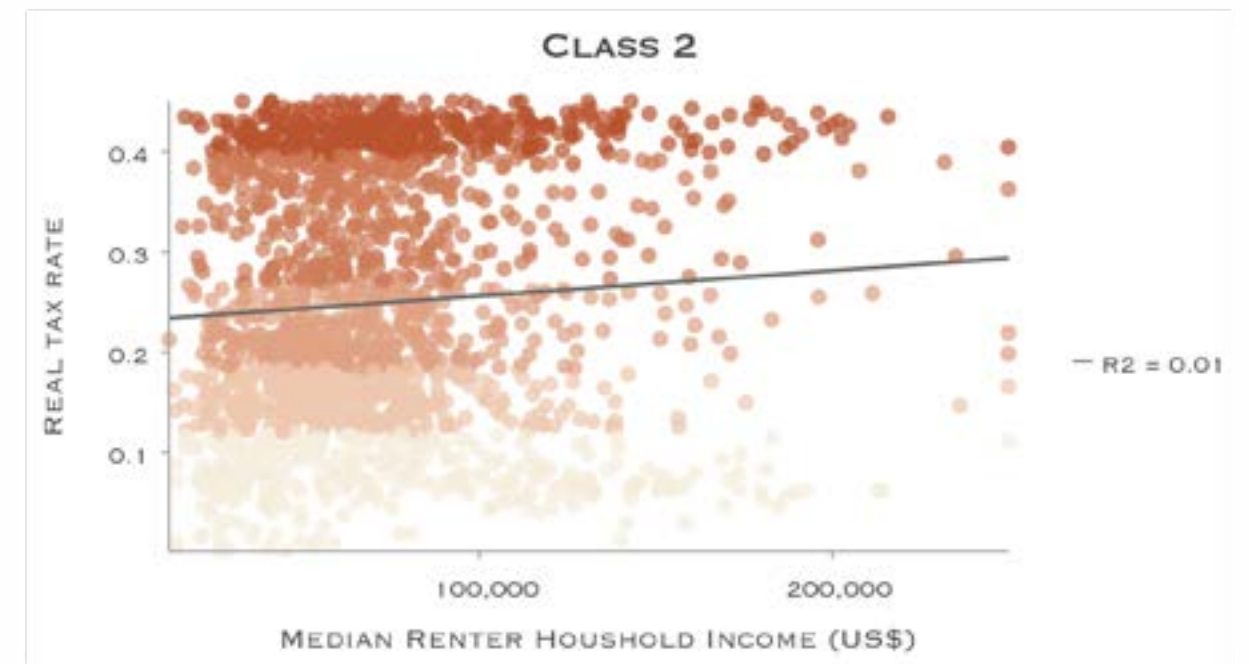
MEDIAN CLASS 2 REAL TAX RATE



SOURCE: ACS 2022, NYC OPENDATA



TAX RATE BY INCOME



* Some data points excluded from plot for legibility

ASSESSING NEW YORK CITY

As opposed to taxing real estate property based on a percentage of the estimated market value, the City of New York taxes a share of the “assessed value” of the property. This assessed value is calculated at different rates based on the property’s tax class and is reflects a share of the estimated market value (which is already often much less than the actual market value were the property to be sold today).

Level of Assessment

- Class 1** (1-3 unit residential properties): **6%**
- Class 2** (Residential properties with more than 3 units, including cooperatives and condominiums): **45%**

Tax Bill Calculation

$$[(\text{market value}) \times (\text{level of assessment})] \times (\text{tax rate}) = \text{tax bill}$$

The particular issue under scrutiny in the lawsuit relates to the caps that currently exist on the amount that the assessed property value can increase year over year. For Class 1 properties, this cap is 6% every year, or 20% over five years. For Class 2 properties, assessed value growth is capped at 8% every year, or 30% over five years. These caps create a gap between the market value and the assessed value that grows bigger and bigger if market value increases more than the assessed value is permitted to increase.

EXAMPLE OF A 1-3 FAMILY HOME	YEAR 1	YEAR 2	YEAR 3
Market Value	100,000	150,000	140,000
Assessed Value if increases were not capped	6,000	9,000	8,400
Assessed Value with Caps on Increases	6,000	6,360	6,741

Instead of the city’s “standardized” tax rates, the maps and charts above use the real tax rate that property owners are paying relative to the estimated market value of their property, rather than the assessed value. To find this number, I used the Department of Finance’s property tax roll to do the following calculation:

$$[(\text{taxable value}) - (\text{exemptions})] / (\text{market value}) = \text{real tax rate}$$

As the analysis above demonstrates, Class 1 properties demonstrate significant regressive taxation, where lower valued properties and lower income households are paying a higher percentage of their property value in taxes.

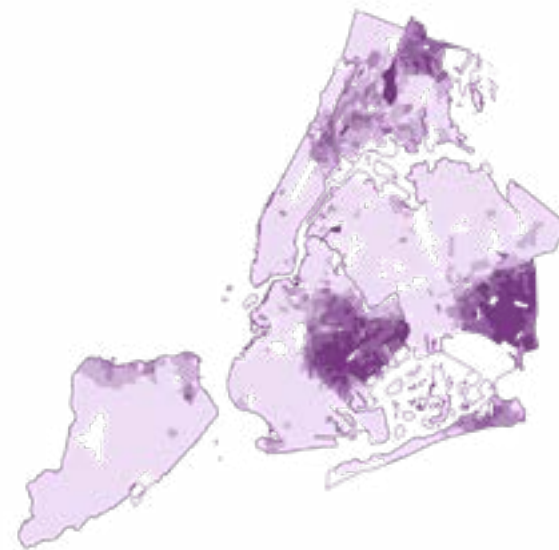
Class 2 properties, which are a much more varied tax class encompassing anything from a 4-unit building to a super tall, do not show the same patterns. However, the data does show only a small positive correlation between real property tax rate and renter household income, suggesting there may be only a small difference in the tax rate that low- and high-income renter households are paying. With this tax class, though, it is difficult to parse out which properties have a high market value due to being a bigger building, being a nicer building, being located in a valuable neighborhood, or some combination of factors,

NYC BY RACE

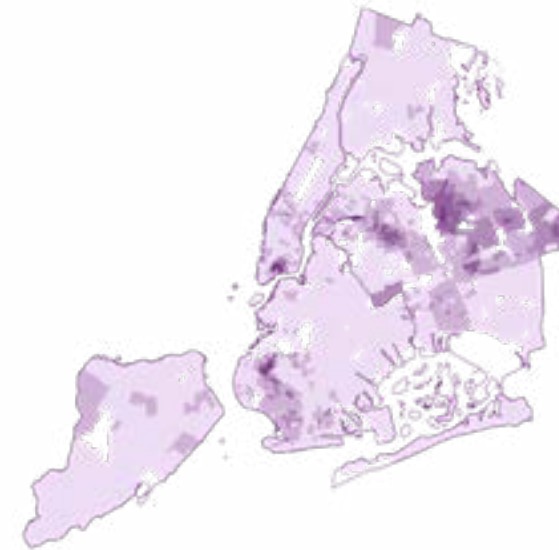
WHITE



BLACK



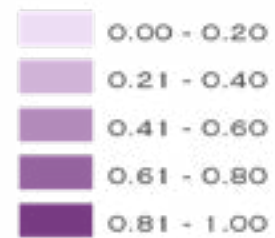
ASIAN



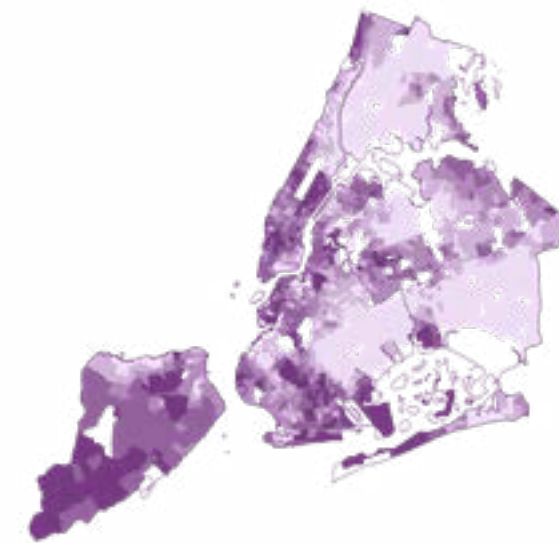
OTHER



PERCENT OCCUPIED
HOUSING UNITS



WHITE, NON-HISPANIC/LATINO



HISPANIC/LATINO



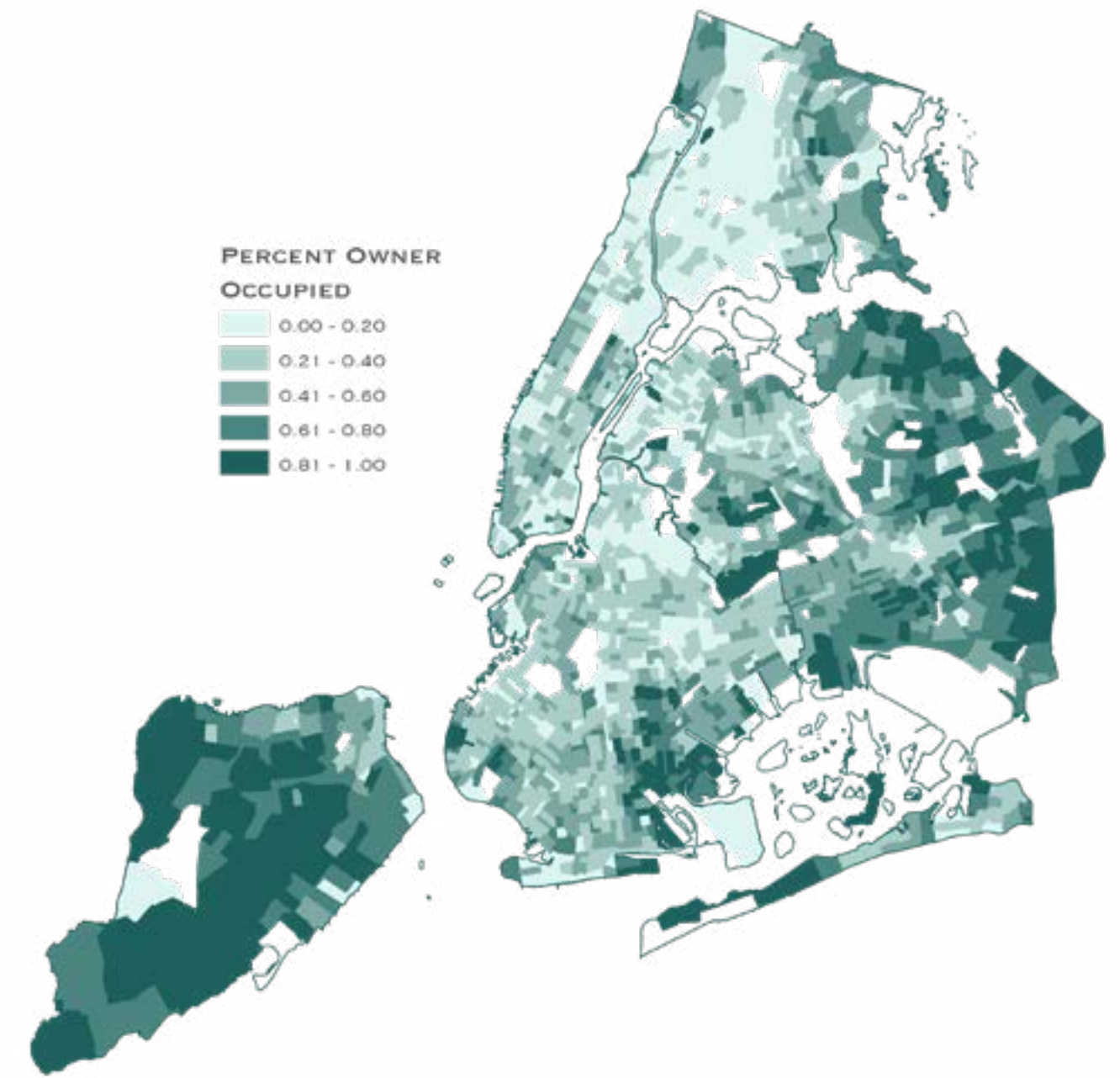
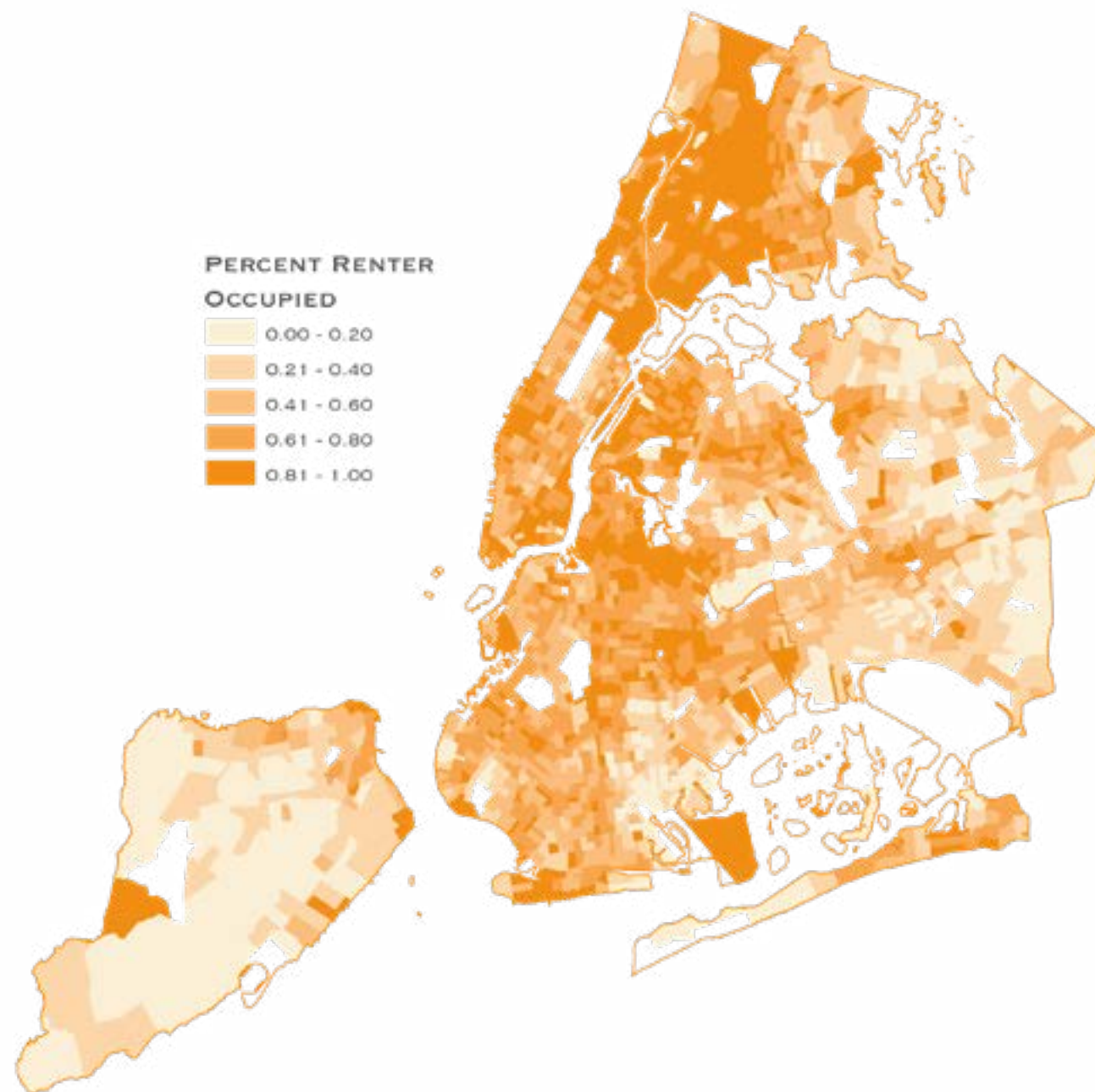
SOURCE: ACS 2000, NYC DEPARTMENT OF PLANNING



NYC BY TENURE

Large swaths of the Bronx, Manhattan, and Brooklyn have a vast majority of housing units occupied by renters.

While these maps conceal the fact that approximately 70% of New Yorkers are renters, those that are owners are very clearly concentrated in the outermost edges of the outer boroughs.

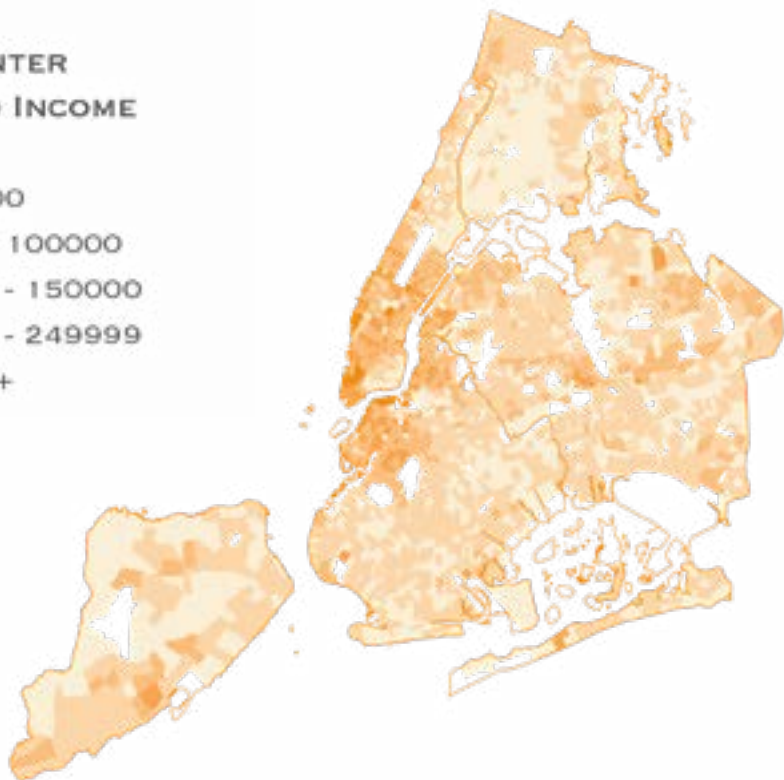
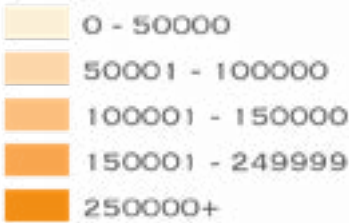


SOURCE: ACS 2022, NYC OPENDATA

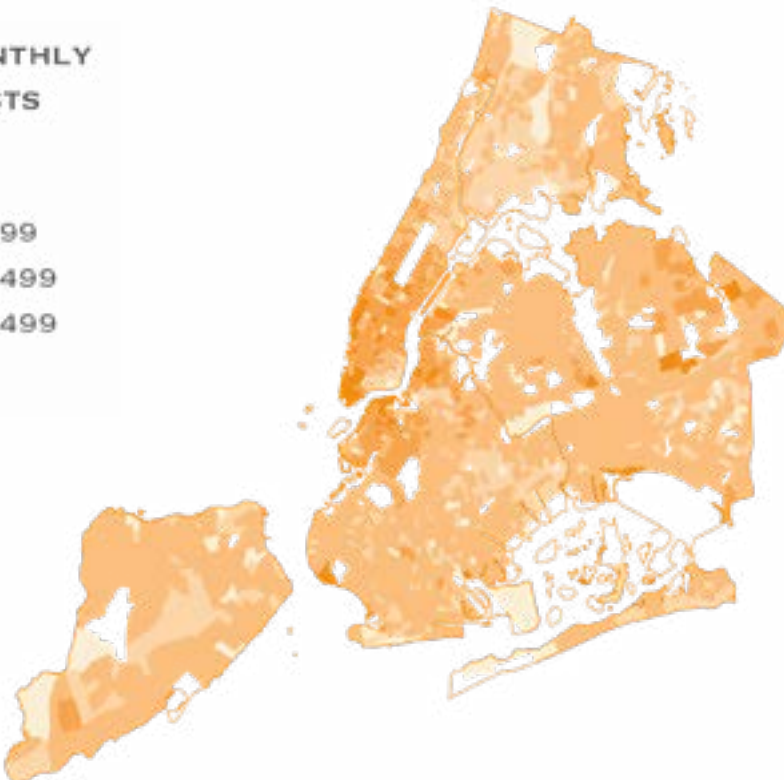
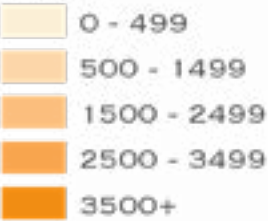


NYC BY TENURE

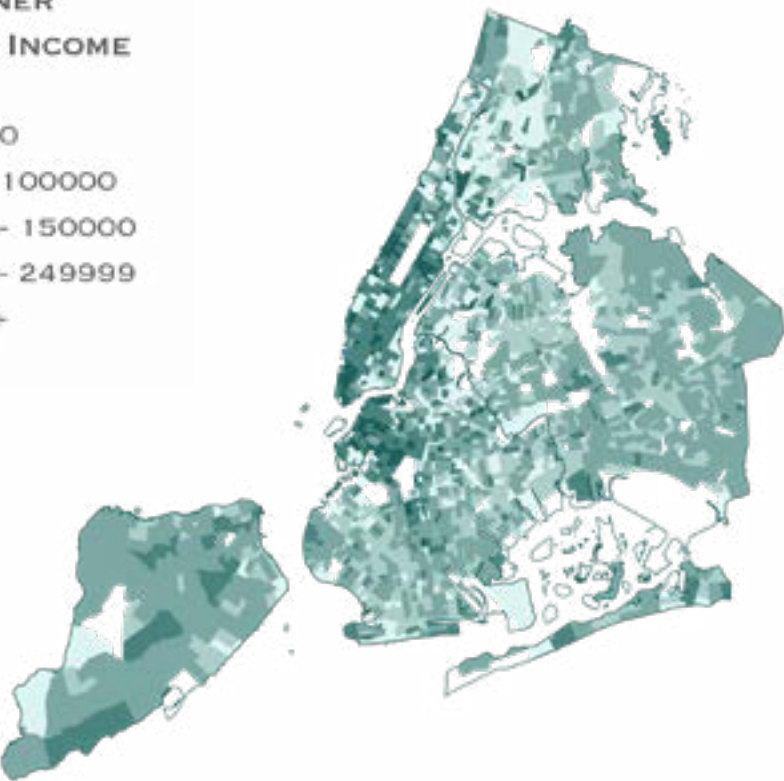
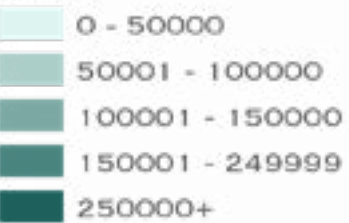
MEDIAN RENTER
HOUSEHOLD INCOME
(US\$)



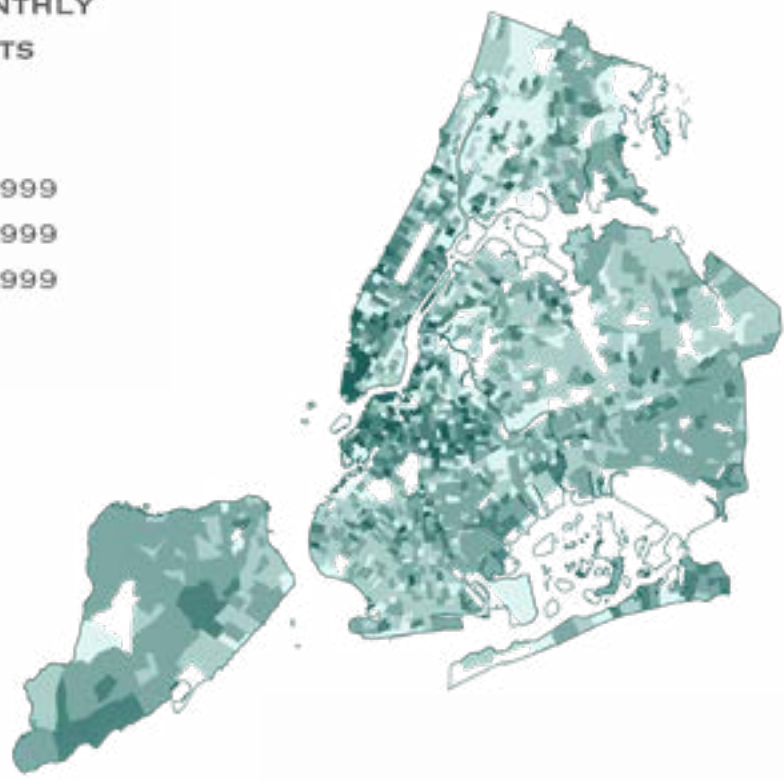
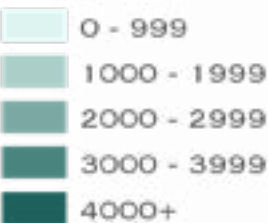
MEDIAN MONTHLY
RENTER COSTS
(US\$)



MEDIAN OWNER
HOUSEHOLD INCOME
(US\$)



MEDIAN MONTHLY
OWNER COSTS
(US\$)



MCDA ANALYSIS

In order to encapsulate the threat of displacement of long-term residents caused by gentrification, this multi-criteria decision analysis includes neighborhood change metrics to measure households that may not currently be cost burdened but nevertheless are vulnerable to rising housing costs.

Percent Cost Burdened **x 50%**

+

Percent Change Household Income (2012-2022) **x 25%**

+

Percent Change White Non-Hispanic/Latino Occupied Units (2012-2022) **x 25%**

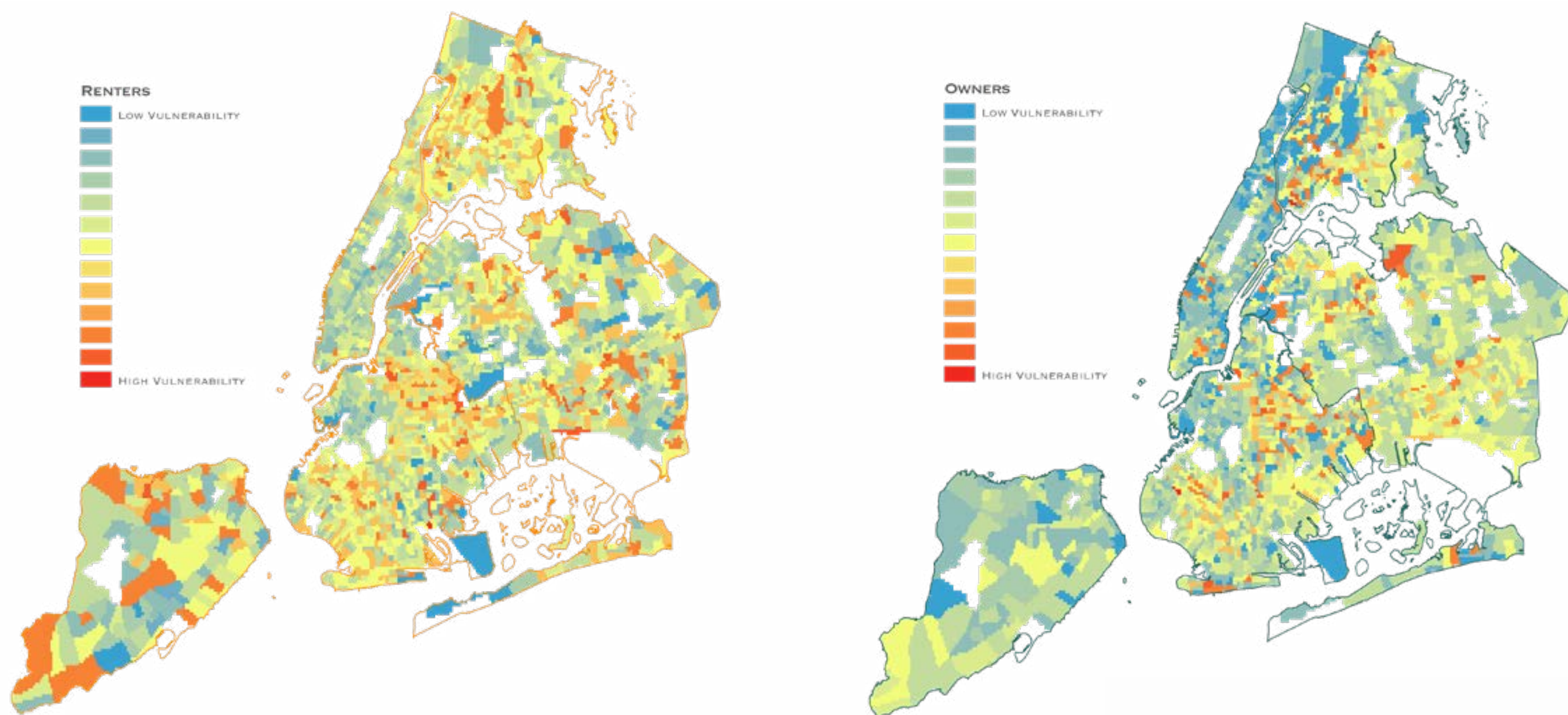
RENTERS



OWNERS



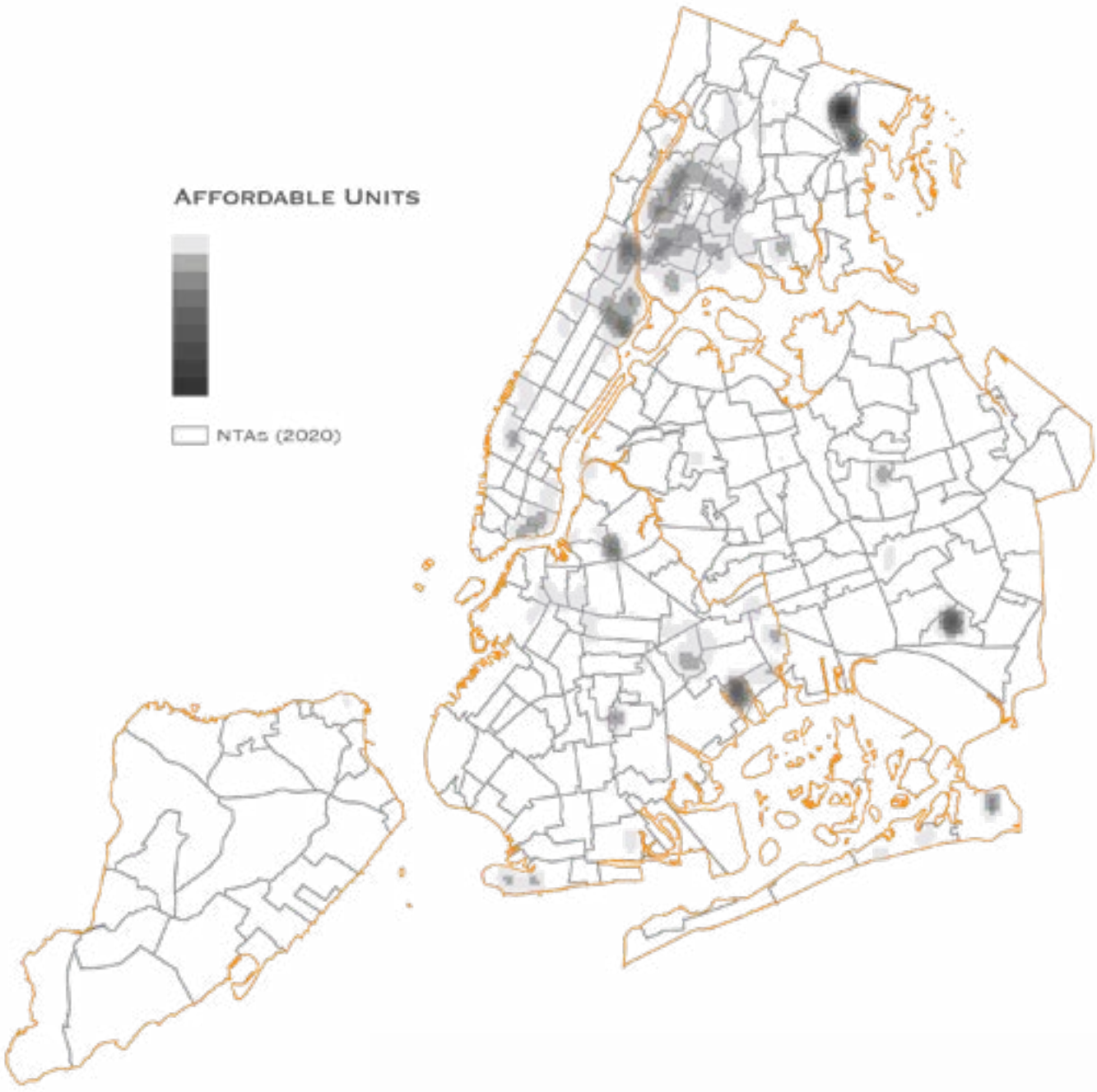
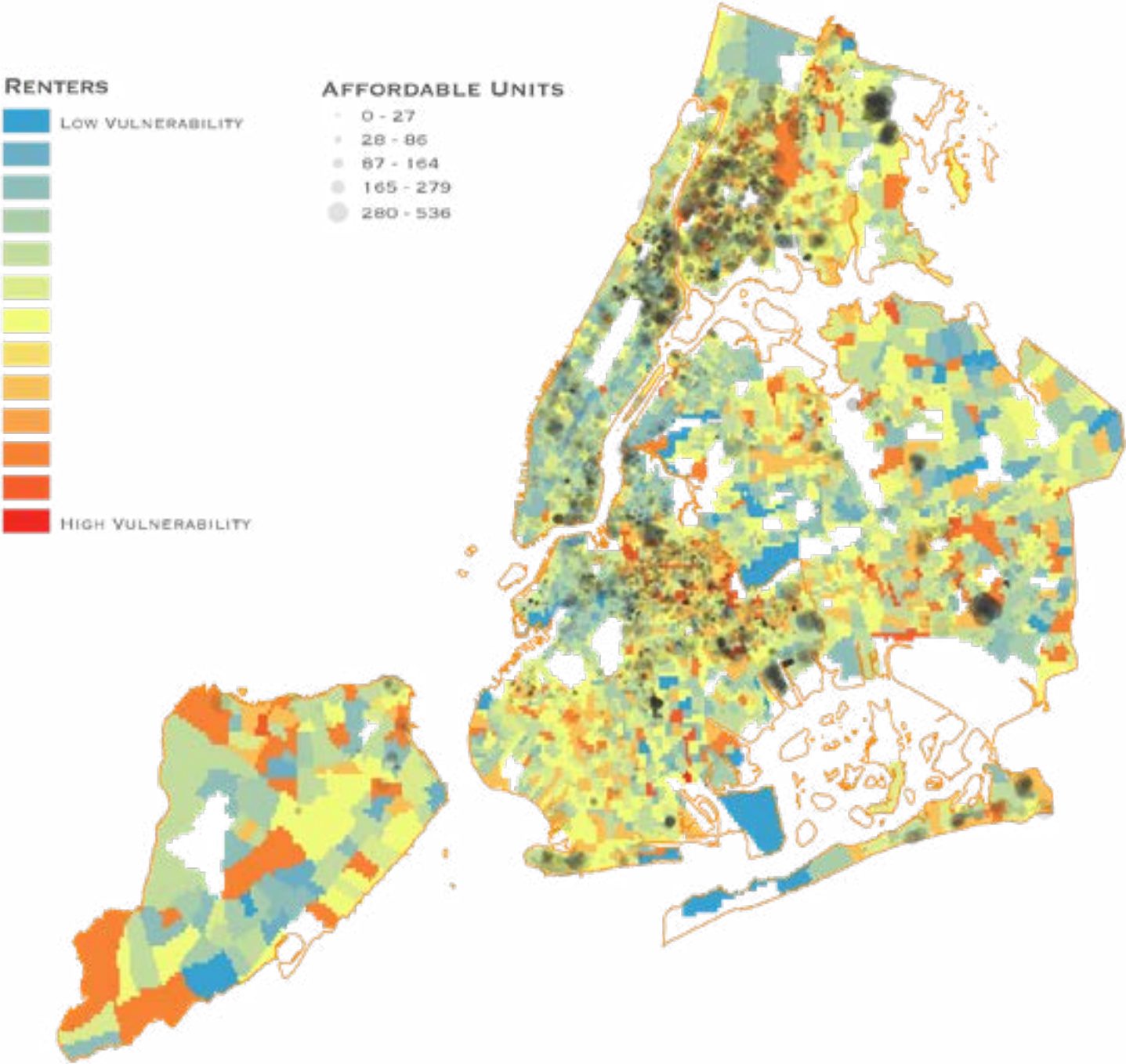
HOUSING COST BURDEN VULNERABILITY INDEX



SOURCE: ACS 2022, NYC OPENDATA

AFFORDABLE HOUSING

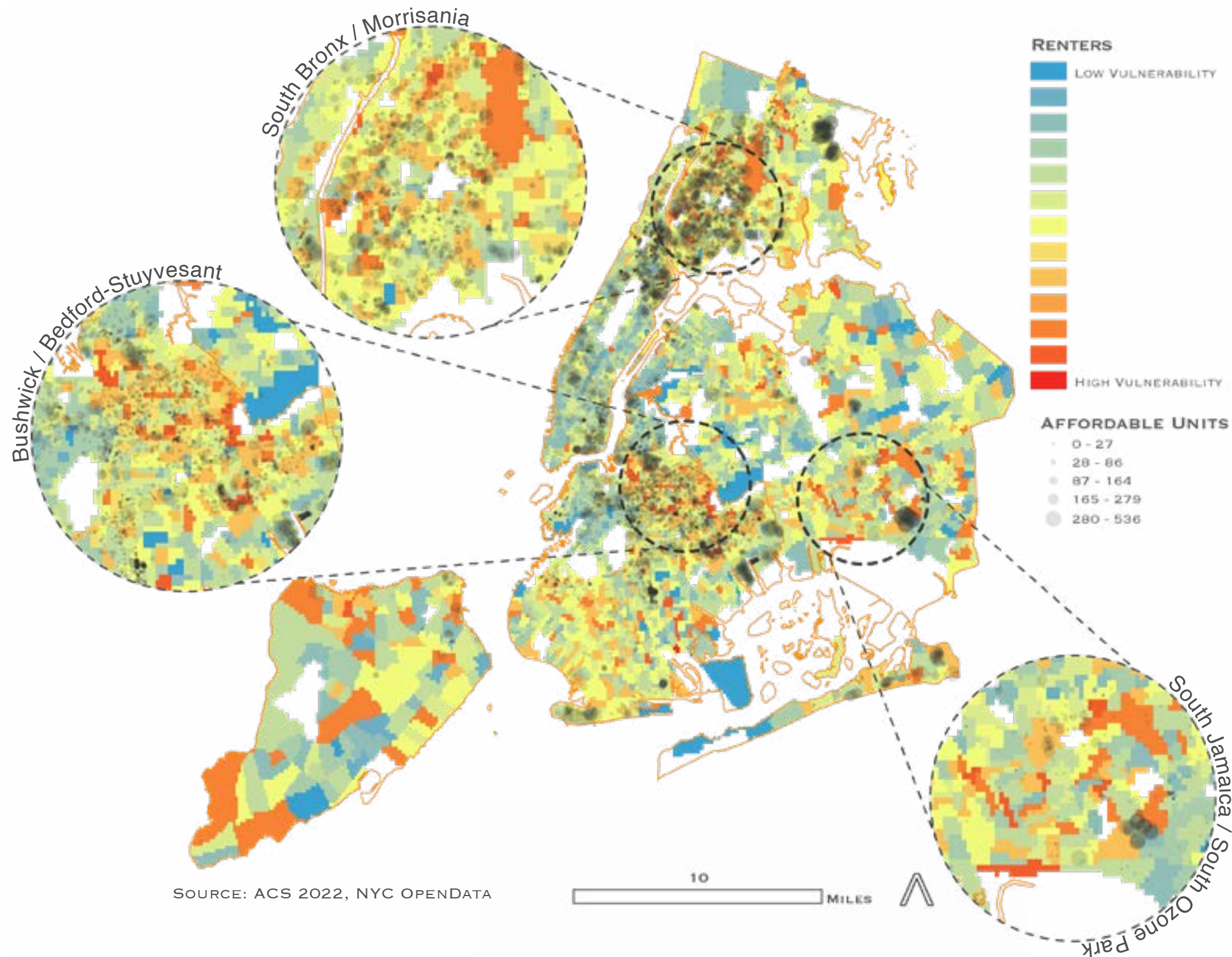
Affordable housing production (targeting households earning less than 80% of area median income) in the past ten years has largely been concentrated in the Bronx, upper Manhattan, and some parts of Brooklyn.



SOURCE: ACS 2022, NYC OPENDATA



VULNERABLE NEIGHBORHOODS



Similar to the higher taxed homeowners, renters in these areas are paying high housing costs relative to their income. Changes in these neighborhoods, marked by shifts in the demographic and income profile of households, has the potential to leave residents vulnerable to rising housing costs.

While it appears that affordable housing production has been well located in vulnerable neighborhoods, the current property tax system means that a disproportionate share of the tax burden gets passed on to renters through inflated market rate rents.

In addition to continuing to build more much-needed housing, New York must overhaul its property tax system in order to address the inequities that leave already vulnerable renters and poorer homeowners of color paying more than their fair share.

SOURCES

City of New York. (n.d.). Affordable Housing Production by Building. NYC Open Data. Retrieved November 12, 2024, from https://data.cityofnewyork.us/Housing-Development/Affordable-Housing-Production-by-Building/hg8x-zxpr/about_data.

City of New York. (n.d.). Primary Land Use Tax Lot Output (PLUTO). NYC Open Data. Retrieved November 12, 2024, from https://data.cityofnewyork.us/City-Government/Primary-Land-Use-Tax-Lot-Output-PLUTO-/64uk-42ks/about_data

City of New York. (n.d.). Property Valuation and Assessment Data Tax Classed 1, 2, 3, 4. NYC Open Data. Retrieved November 12, 2024, from https://data.cityofnewyork.us/City-Government/Property-Valuation-and-Assessment-Data-Tax-Classes/8y4t-faws/about_data.

Comptroller of the City of New York. (2023, December 15). Annual State of the City's Economy and Finances. New York City Comptroller. Retrieved November 12, 2024, from <https://comptroller.nyc.gov/reports/annual-state-of-the-citys-economy-and-finances/>.

Gothamist. (2024, March 19). Top state court rules NYC property tax system violates federal and state housing laws. Gothamist. Retrieved November 12, 2024, from <https://gothamist.com/news/top-state-court-rules-nyc-property-tax-system-violates-federal-and-state-housing-laws>.

Tax Equity Now NYC. (n.d.). Research. Tax Equity Now NYC. Retrieved November 12, 2024, from <https://taxequitynow.nyc/research/>.

The New York Times. (2024, April 2). NYC property tax system may violate federal housing laws, court rules. The New York Times. Retrieved November 12, 2024, from <https://www.nytimes.com/2024/04/02/nyregion/nyc-property-tax.html>.

U.S. Census Bureau. (2022). American Community Survey 5-Year Estimates. U.S. Department of Commerce. Retrieved November 12, 2024, from <https://data.census.gov/>.

U.S. Census Bureau. (2012). American Community Survey 5-Year Estimates. U.S. Department of Commerce. Retrieved November 12, 2024, from <https://data.census.gov/>.

LIMITATIONS

- Data parsed by tenure uses the information of the primary householder, as opposed to reflecting data for the entire population.
- The housing cost burden calculation used data for households spending 30% or more of their income towards housing, which somewhat inflates the rate of cost burden as those spending exactly 30% of their income towards housing would not be considered cost burdened. This metric also does not allow for distinguishing between those who are spending 31% of their income on housing costs, and those spending 51%, which obviously would be a very different situation.
- While there is certainly significant overlap, properties in Class 1 are not exclusively occupied by homeowners, and properties in Class 2 are not exclusively occupied by renters.
- Given the size of the dataset, property valuation and assessment data used to calculate median market value and median tax rate contain some null values, errors, and outliers that were excluded to the best of my ability.