Mapping Gentrification in New York City, 1960-1999

Project Description
After World War II, New York City dominated the world in commerce and population. But the 1960’s marked the beginning of decline for the city as it experienced racial and religious tension, power outages, garbage and transit strikes, and manufacturing and industry decline. By the 1970’s more than a million people had fled to the suburbs leaving the city to languish in economic decline and rampant crime. But today New York City is arguably the most powerful, expensive, and desirable cities to live in the world. This is largely due to a period of extreme gentrification in the 1980s and 1990s.

To document this change visually, this project maps the following demographics and physical indicators of gentrification by census tract:
- Aggregate gross rent of renter-occupied housing units
- Average annual income per family
- Persons age 25-34
- Persons age 25+ with higher education degrees (bachelors or graduate/professional)
- Number of renovated/remodeled tax lots

Methodology
To determine overall gentrification patterns (see bottom left), each indicator was scored 1-4, based on quantiles (smallest=1 and largest =4). For example: if a census tract was given a score of 4 for educational attainment then that tract fell in the top quantile (25%) for the percentage of people with higher education. After scoring each indicator 1-4 for each census tract, the scores for all five indicators were totaled. Thus the lowest possible score is 5 and the highest possible score is 20. The Geolytics Neighborhood Change Database was used for the demographic data and the Map Pluto Tax Lots Database was used for the physical data.

Overall Gentrification 1960s-1990s
These maps show overall gentrification levels for all five indicators combined. The blue areas (very high) show the highest 25% of all indicators. The pale yellow areas (low) shows the lowest 25% of all indicators.

Individual Indicators

Overall Gentrification Results
Overall levels of gentrification in specific areas of Manhattan, Brooklyn, and Queens increased dramatically from the 1960s and 1970s to the 1980s and 1990s. Today these neighborhoods - the Upper East Side, Greenwich Village, Brooklyn Heights, to name a few - are the epitome of costly, elitist living. Other areas show little or no change over this period - Harlem in far upper Manhattan, the Lower East Side of Manhattan (LES), and the Bronx. Although these areas still offer affordable rents, a positive quality for residents, the rest of the city had enormous gains in income and higher education, while these neighborhoods had stagnant income and education levels - a disturbing fact.

Average Income
Average annual family income was the only income data consistent for all four decades. Median income data is more accurate, but average family income still provides an interesting visual showing the dramatic income level spike during this period. As shown, the top average family income level in the 1960s was $125,000 and in the 1990s it was $900,000.

Aggregate Rent
Aggregate rent data (sum of all monthly rent in a census tract), shows an interesting trend. It appears that the highest rents in the 1960s were in the Bronx and Brooklyn, but these areas also had the lowest income levels as shown above in the income map. If the data is correct, there are two possible explanations:
1. Most people owned homes instead of renting in the 1960s, thus the low rents in high income areas.
2. This was a known period of predatory renting to African American communities which would explain high rents in the Bronx and parts of Brooklyn.

Age Cohort (25-34)
Percent of people age 25 to 34 was determined by combining multiple age data tables, producing a total number for each census tract, and dividing by total population per census tract. The percent age 25-34 increased dramatically from the 1960s to the 1990s in parts of Manhattan and Brooklyn and moderately increased for New York City as a whole.

Renovations
Number of renovations was calculated by using the Map Pluto tax lots, merging tax lots for all boroughs into one layer, and creating a new layer for renovations from each decade. As seen in the renovation maps, the number of renovations spikes drastically in the denser urban areas in the 1980s and 1990s consistent with gentrification trends.

Higher Education
The data for higher education for people age 25+ was divided by total age 25+ population to achieve a percentage. As shown, New York City as a whole had enormous gains in higher education levels during this period. In some areas of Manhattan and Brooklyn the levels are at 61%–100% for the 1990s. Yet, the Bronx, Harlem, the LES and parts of Brooklyn show no change in higher education levels between the 1960s and the 1990s.