Gianna Lamarre 7 September 2025

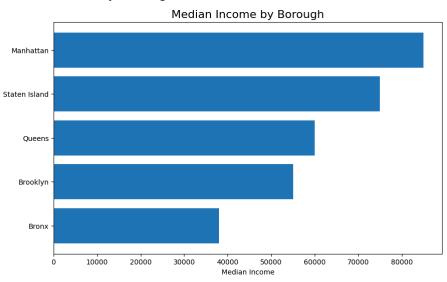
The purpose of this project is to explore and analyze relationships between teen birth rates and various socioeconomic factors across New York City boroughs (Bronx, Brooklyn, Manhattan Queens, Staten Island) and to identify target boroughs that are in need of better access to sexual healthcare among teenagers. Using Excel to congregate the data and Python to create various visualizations, several insights emerged:

Key Findings

Summary:

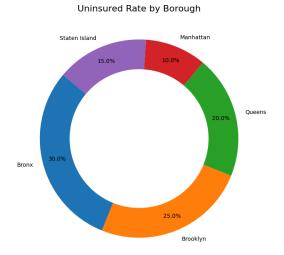
Data reveals the primary drivers of high teen birth rates across New York City boroughs are low median income and high uninsured rates. The Bronx stands out as the most critical target borough, demonstrating the most severe combination of all negative indicators. Brooklyn is the second most critical borough, while the others pose a less significant need.

1. Median Income by Borough



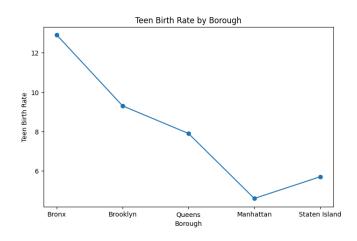
- The Bronx has by far the lowest median income.
- It is followed by Brooklyn, then Queens.
- Staten Island and especially Manhattan have the highest median incomes.

2. Uninsured Rate by Borough



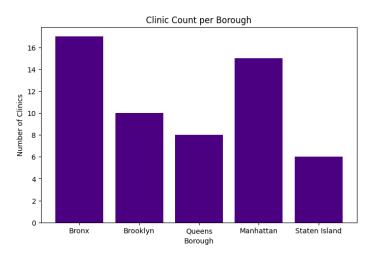
- The Bronx has a critically high insured rate of 30%, triple that of Manhattan.
- Brookyn has the second-highest rate at 25%.
- Queens (20%), Staten Island (15%), and Manhattan (10%) have lower rates.

3. Teen Birth Rate by Borough



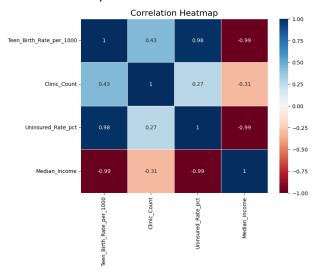
- The Bronx has the highest teen birth rate, followed by Brooklyn.
- Queens, Manhattan, and Staten Island have significantly lower and declining rates.

4. Clinic Count per Borough*



- The number of clinics does not correlate with better outcomes. The Bronx has a high number of clinics yet still suffers from the worst teen birth rate, uninsured rate, and lowest income.

5. Correlation Heatmap

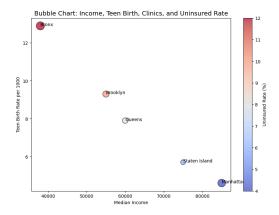


- Teen Birth Rate and Median Income (-0.99): An almost perfect strong negative correlation, meaning that as median income in a borough decreases the teen birth rate dramatically increases.
- Teen Birth Rate and Uninsured Rate (0.98): An almost perfect strong positive correlation, meaning that New Yorkers that are uninsured have significantly higher teen birth rates.
- Median Income and Uninsured Rate (-0.99): An almost perfect strong negative correlation, meaning that these two socioeconomic factors are linked.

^{*}Clinics are based on family planning clinics provided by the Office of Public Affairs and cross referenced with DOH. Does not account for PCPs, hospitals, OBGYNs, etc.

 Clinic Count Correlations: The weaker socieconomic factor (facilities present in borough) suggests that simply having clinics alone is not enough to influence teen birth rates.

6. Bubble Chart: Income, Teen Birth, Clinics, and Uninsured Rate



- The Bronx appears as a clear outlier cluster: positioned with the lowest income, highest teen birth rate, and a high uninsured rate (implied by its position on the x-axis).
- Brooklyn is the second-most critical borough, with lower income and higher teen birth rates than Queens, Manhattan, and Staten Island.
- The other three boroughs (Queens, Manhattan, Staten Island) cluster together with higher incomes and lower teen birth rates

Recommendations:

- Meeting teens where they are. We know clinics exist in the Bronx and Brooklyn, but the data shows they aren't connecting enough with the teens who need them most. Let's shift our focus from just counting clinics to ensuring their services are truly accessible and welcoming to young people through targeted school-based programs, social media posts and community outreach.
- Tackle the real barrier: cost. The strongest predictor of high teen birth rates is low income. We can't ignore the financial hurdle. Our programs must aggressively connect teens and their families with health insurance options and guarantee that cost is never a reason to deny care, counseling, or contraception.
- Prioritize the Bronx with a dedicated strategy. The data paints a clear and urgent picture: the Bronx needs our focused attention. This borough requires a hyper-local strategy that combines affordable healthcare access, tailored sex education and youth support services to address its concentrated socioeconomic challenges.