

Accessibility for People Living in Affordable Housing

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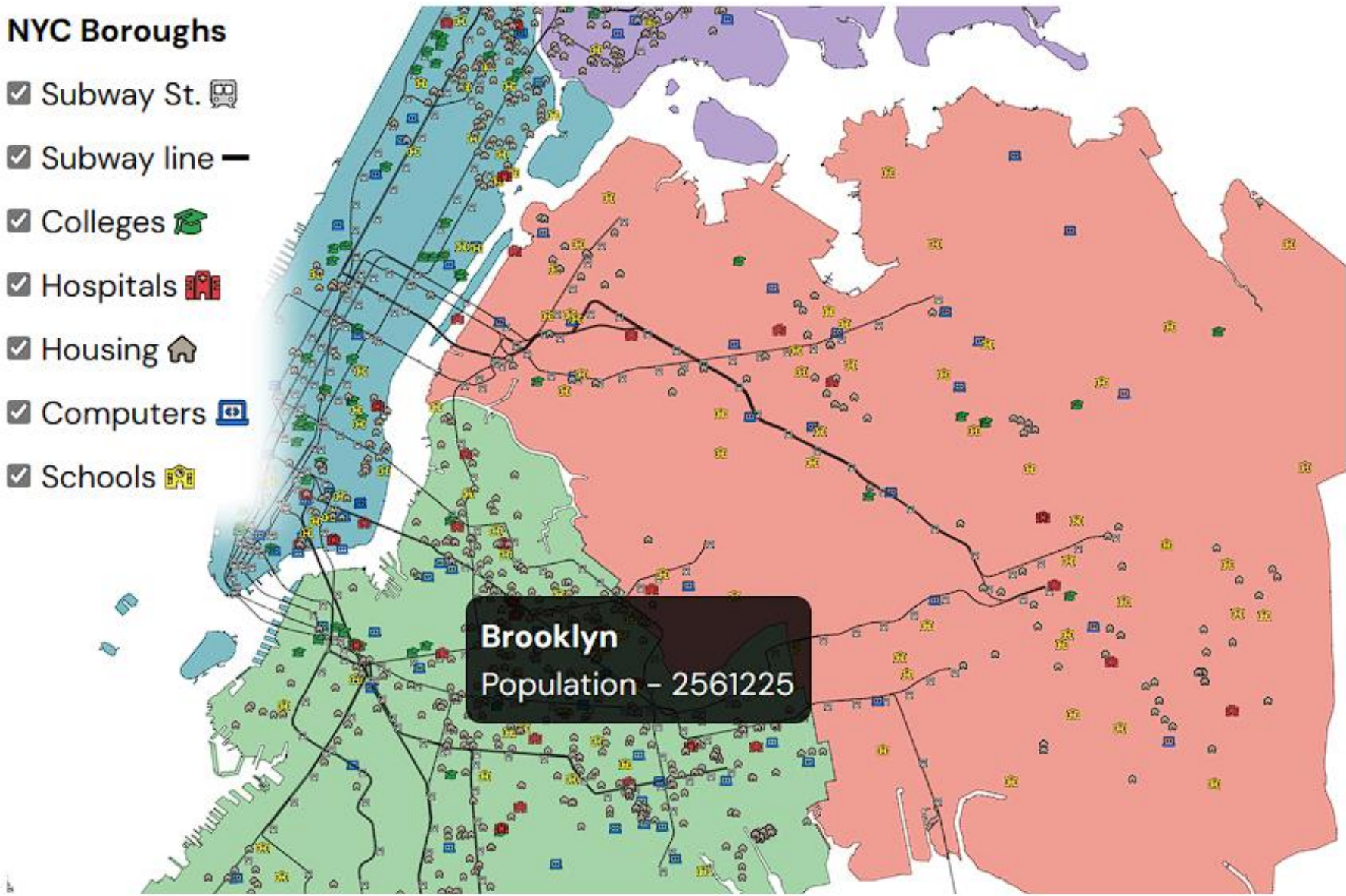
Group 26

Dashboard

The visualization is designed to offer ideal all-inclusive approach to find affordable housing depending on family needs like education, health care, access to technology and public transport.

It offers following features:

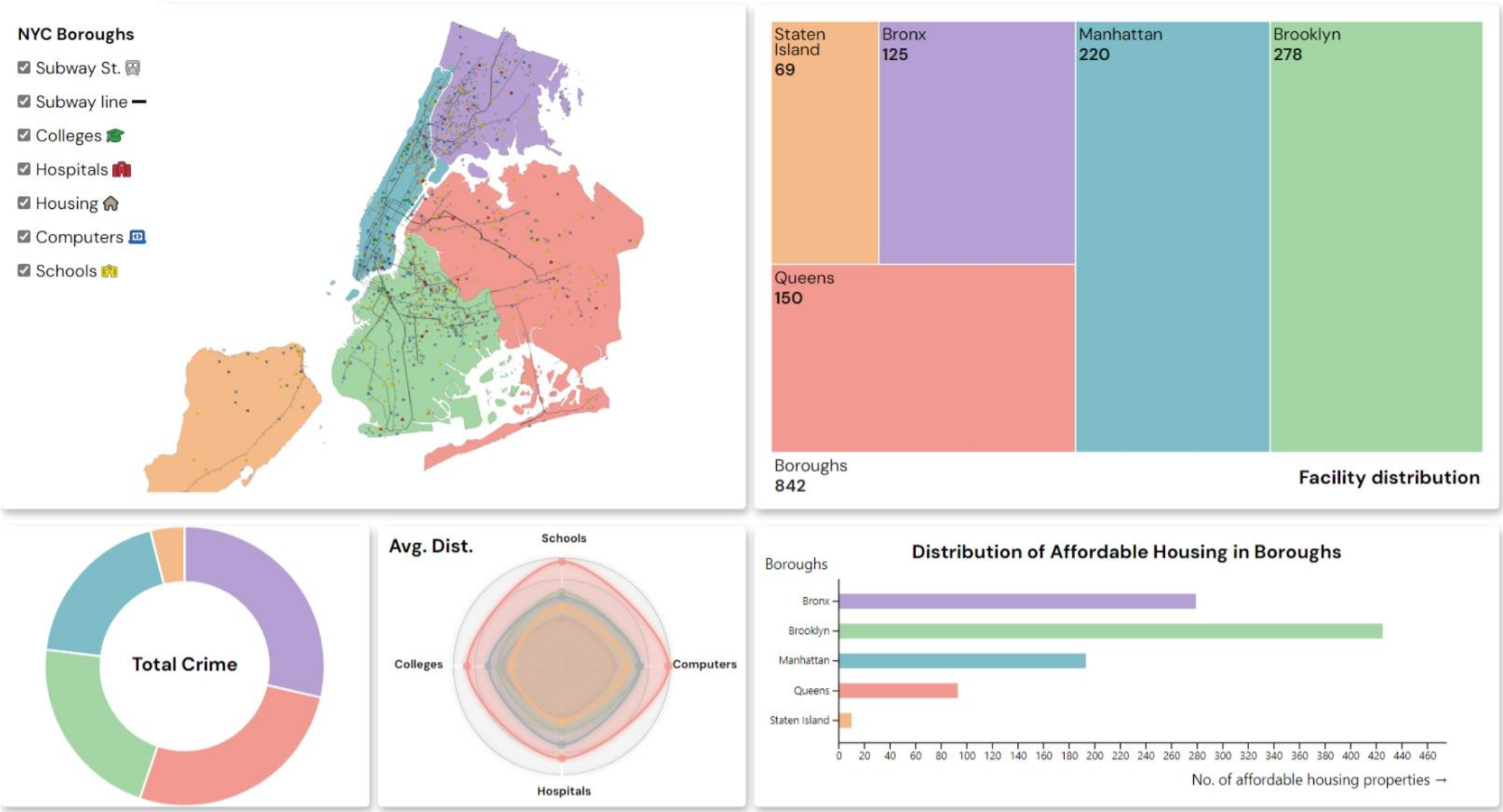
- **Personalized Home Selection:** Guides users in finding a home that suits their specific requirements.
- **Safety Considerations:** Aids in choosing neighborhoods with lower crime rates for a safer living environment.
- **Utility Access:** Highlights areas with convenient access to essential services.
- **Transportation Ease:** Points out homes with nearby subway access for better travel options.
- **Housing Diversity:** Displays the variety of housing options available within a borough.
- **Utility Mapping:** Provides a map to easily locate essential utilities like colleges, computer centers, hospitals and schools in relation to housing.



Charts

Our dataset is visualized through five distinct **linked** graphs, each serving a specific purpose:

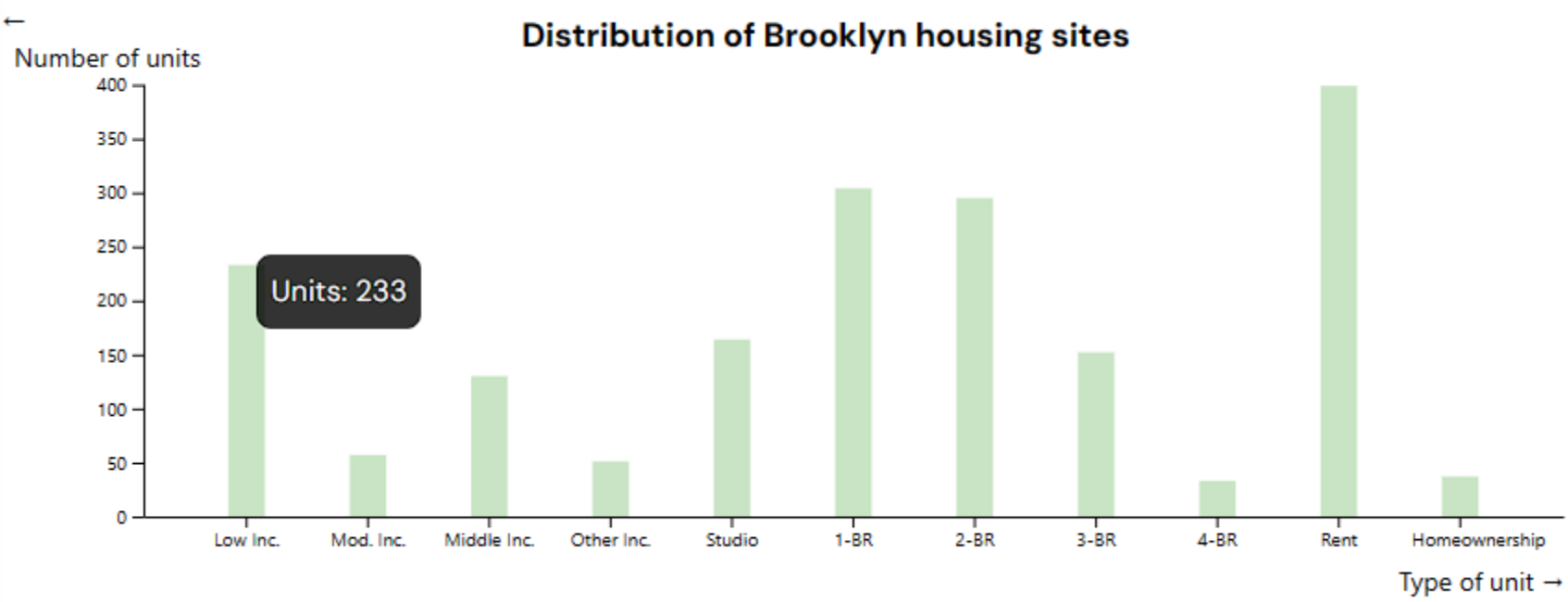
- **Choropleth Map:** Highlights the boroughs, providing a clear visual distinction between them. Users can pan and zoom graph for accessibility. A tooltip provides details about facilities.
- **Tree Map:** Illustrates the distribution of utilities such as colleges, schools, hospitals, and computer centers. It shows the hierarchy of distribution within each facility.
- **Pie Chart:** Represents the total crime distribution and crime rate across the boroughs of New York City. User can toggle between Total Crime and Crime Rate by clicking in the middle.
- **Bar Chart:** Shows the housing distribution within boroughs and offers a detailed view of the variety of housing types. On clicking a bar for any borough, it displays the housing distribution within that borough.
- **Radar Chart:** Indicates the average distance of affordable housing from schools, colleges, hospitals and computer centers.



Data

Our data includes info about the following:

- **Affordable Housing units** - Houses that fall under the Housing New York plan or the Housing Our Neighbors: A Blueprint for Housing & Homelessness plan.
- **Schools and Colleges** – Public schools and higher education institutes.
- **Subway Tracks with Stations** – MTA tracks.
- **Health care facilities** – Child health centers, Nursing home, Acute care hospital.
- **Crime Stats** – Total crime and Crime rates based on NYPD data.



Results

- **Queens:** Facilities are notably spread out, leading to the longest average distances.
- **Manhattan:** Despite longer average distances, the dense subway network significantly enhances accessibility.
- **Staten Island:** It has the fewest crimes and lowest crime rates suggesting it is a relatively safer area to live in.
- **Bronx:** Abundant affordable housing and facilities are overshadowed by the highest crime rate and total crimes, potentially affecting its desirability.
- **Brooklyn:** Stands out as an ideal borough for families seeking child care and quality pediatric services.
- **Brooklyn Facilities:** Leads in the number of facilities and offers decent accessibility through subway system.
- **Queens:** The dispersion of facilities poses challenges for subway access. Also total crimes is relatively on the higher side making it slightly unsafe.
- Facilities in Manhattan are peripheral, while in Brooklyn and Bronx, they're clustered at one end. The facility dispersion in Staten Island and Queens is not stream lined.
- Manhattan and Brooklyn are abundant in facilities. Manhattan is ideal for families seeking proximity to higher education. However, Brooklyn, with its vast facilities, accessibility, affordability, and lower crime rate, can be considered as on of the top choices for families.

