

Information Visualization

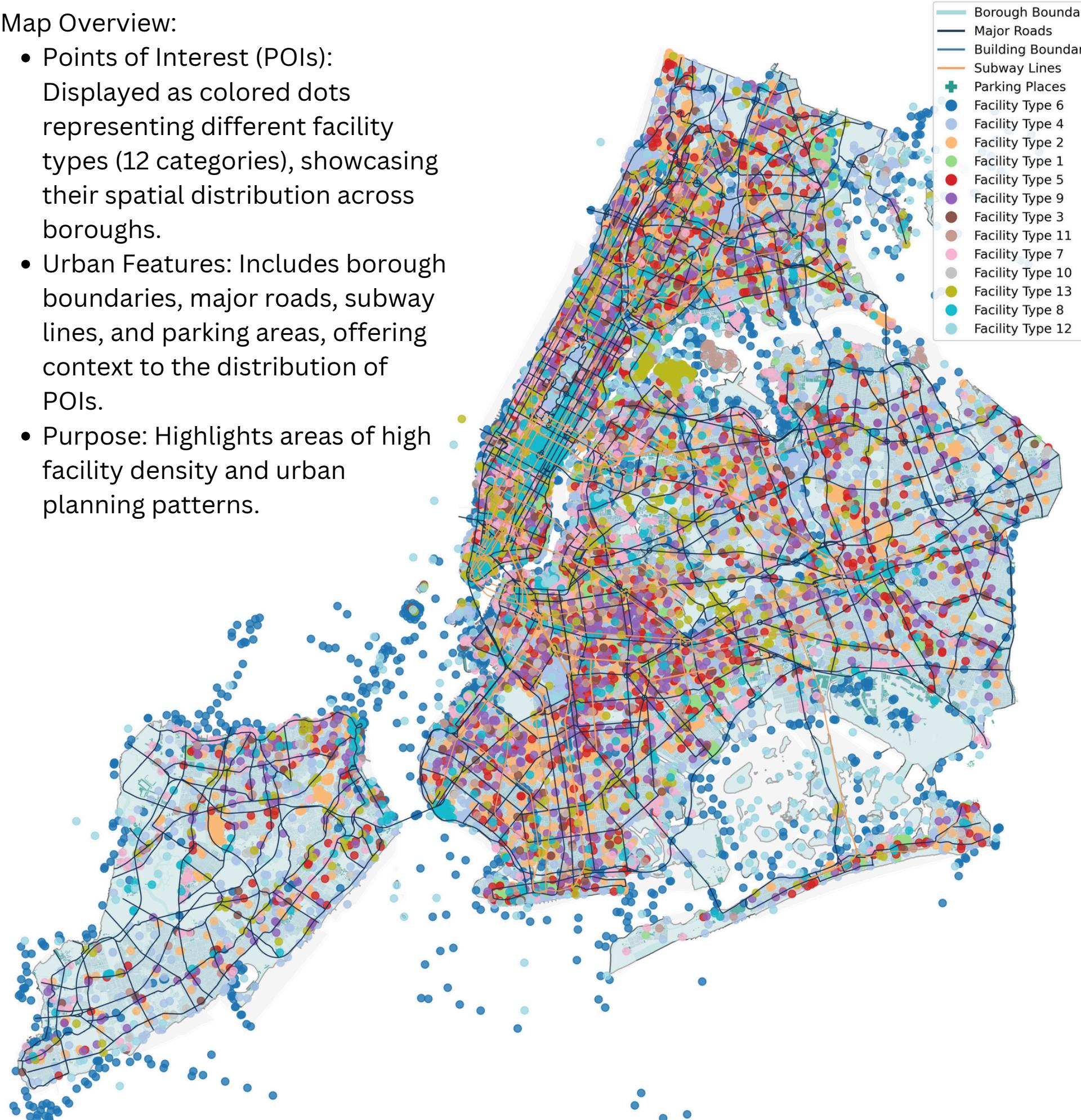


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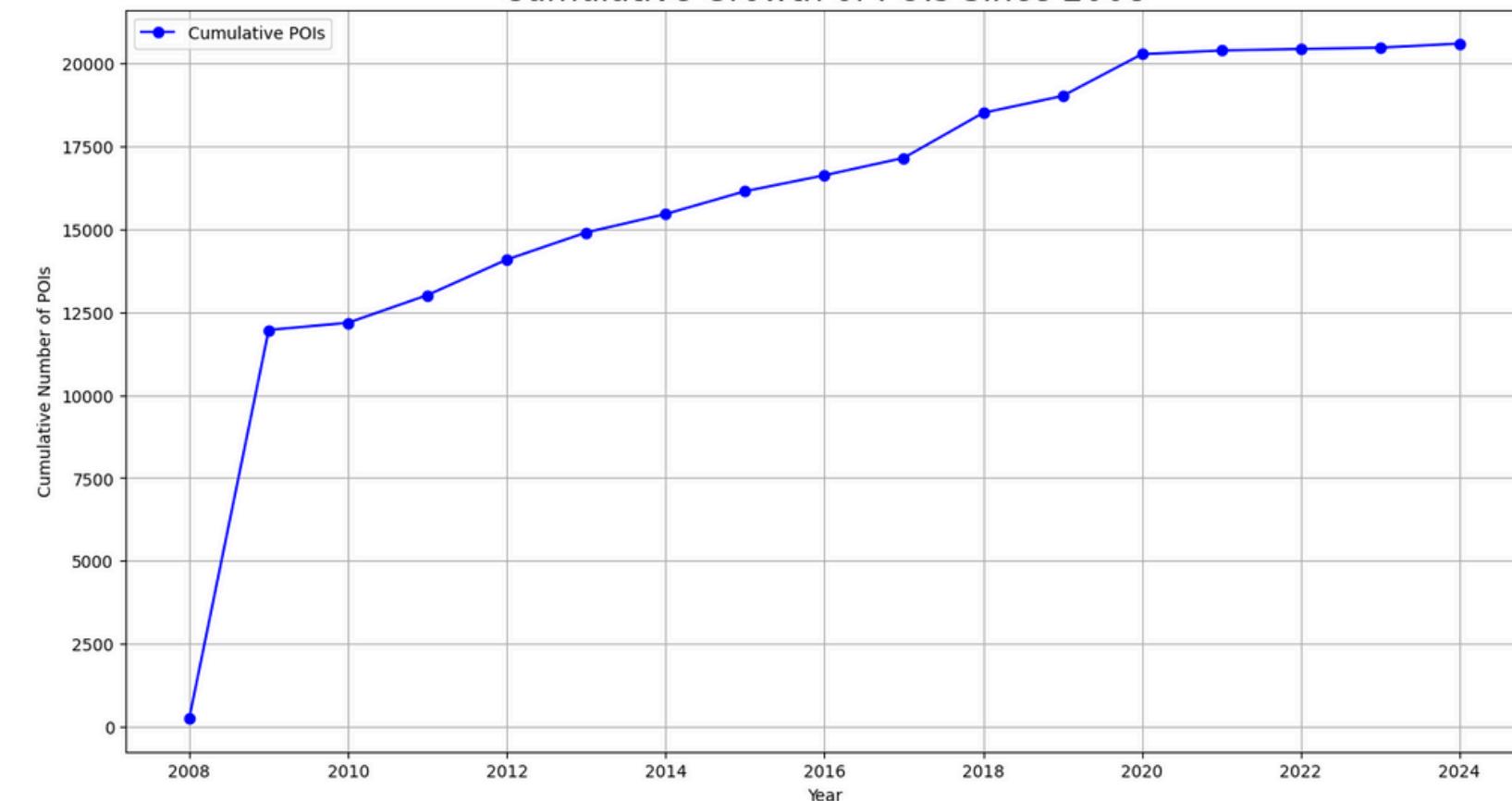
Map of NYC with Major Roads, Subway, Buildings, Parking Places, and POIs (Colored by Facility Type)

Map Overview:

- Points of Interest (POIs):
Displayed as colored dots
representing different facility
types (12 categories), showcasing
their spatial distribution across
boroughs.
- Urban Features: Includes borough
boundaries, major roads, subway
lines, and parking areas, offering
context to the distribution of
POIs.
- Purpose: Highlights areas of high
facility density and urban
planning patterns.



Cumulative Growth of POIs Since 2008

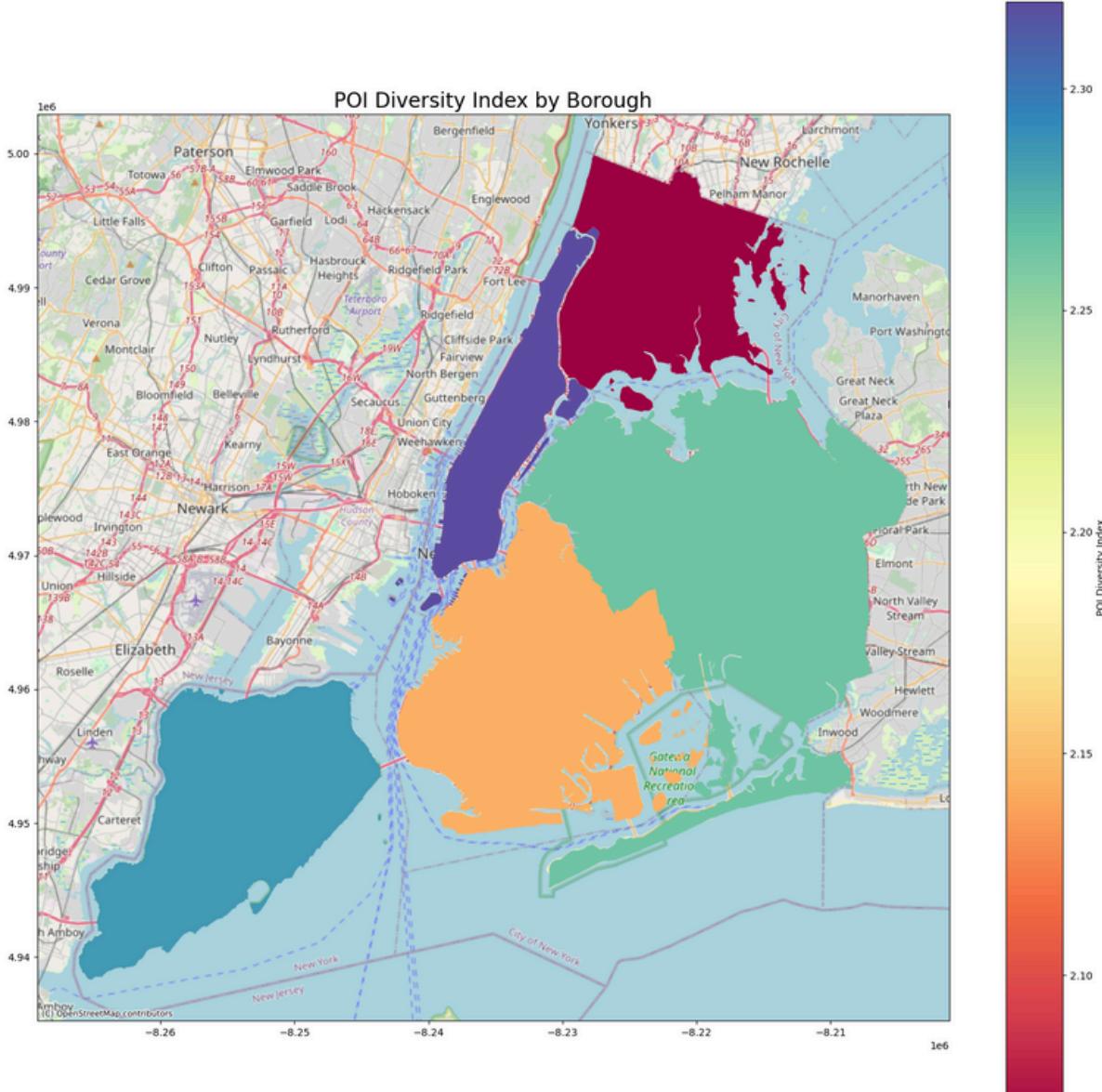


- Visualization: The graph illustrates cumulative POI growth in NYC from 2008 to 2024, showing a steady upward trajectory.
- Trend: Rapid growth occurred from 2008–2016 due to urban development, population growth, and improved data collection, followed by slower growth after 2016.
- Insight: Post-2016, the deceleration suggests market saturation, limited physical space, or a shift toward optimizing existing facilities over expansion.

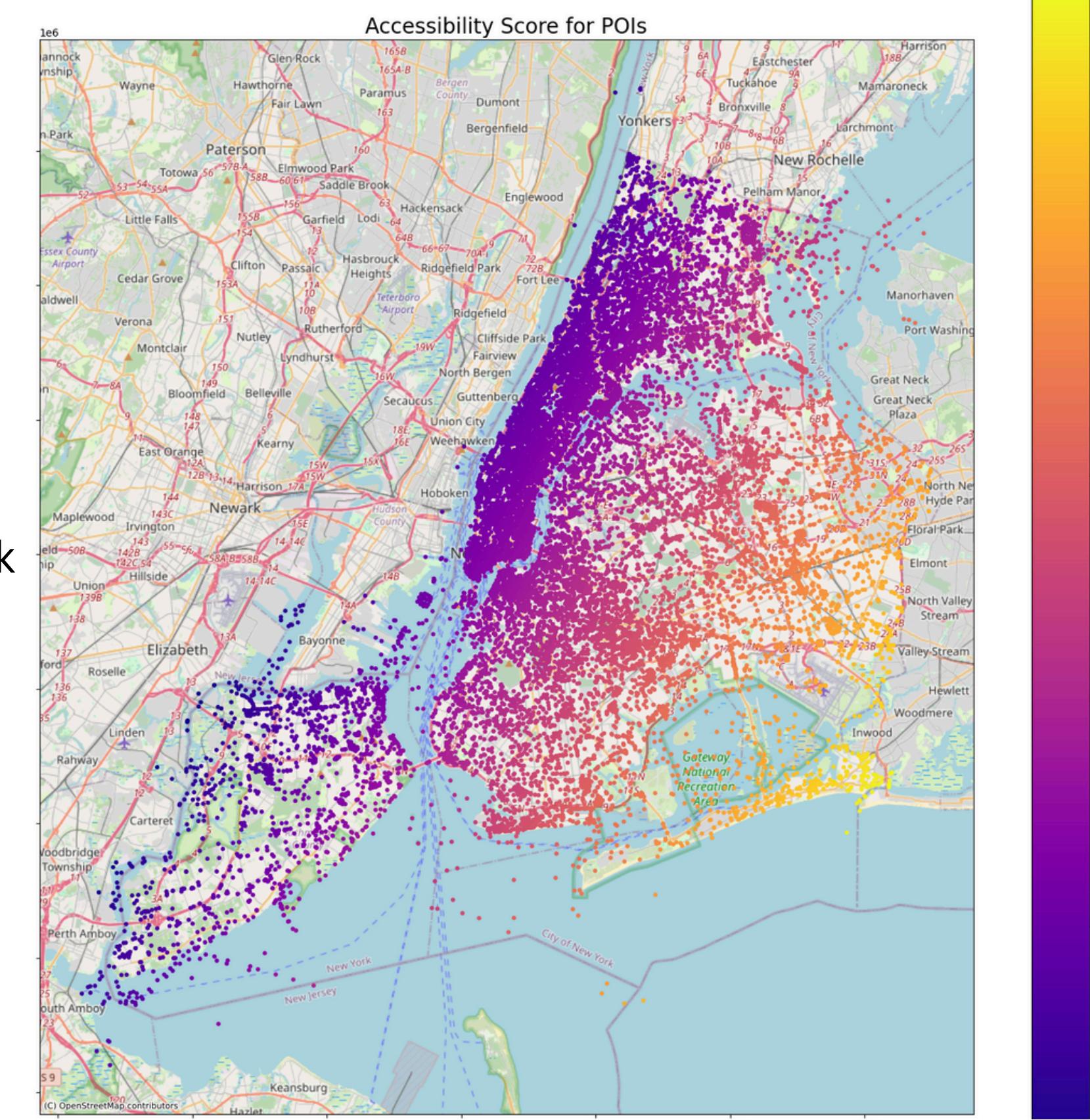
Code Link: <https://github.com/rohit1125/NYC>



The heatmaps illustrate parking density across three major New York City boroughs: Queens, Manhattan, and Brooklyn.



The POI Diversity Index map shows the variation in facility diversity across NYC boroughs. Manhattan stands out with high diversity, reflecting its mix of commercial, cultural, and recreational spaces. Queens and Brooklyn have moderate diversity, combining residential and local commercial zones, while Staten Island shows lower diversity, matching its suburban vibe.



The map shows an accessibility index for POIs across NYC, calculated using subway stations, road connectivity, and POI locations. High-access areas (yellow) are concentrated in transit-dense zones like Manhattan, while low-access areas (purple) highlight underserved regions.