

IST 737.M002

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Visual Analytic Dashboards

**Airbnb Data Insights:
(Jersey City)**

Project Description

This Tableau project provides a comprehensive visual analysis of Airbnb listings in New Jersey. The dashboards explore various dimensions of Airbnb data, including pricing trends, room types, and neighborhood distributions. It highlights key metrics such as average prices, host types, and reviews, alongside interactive filters for deeper exploration. Maps and heatmaps illustrate spatial distribution and seasonal pricing variations, while pie and bar charts offer insights into host verification, super host performance, and financial metrics. The project effectively combines interactive visuals with storytelling to provide actionable insights into the New Jersey Airbnb market.

Data Sources

Jersey City, New Jersey, United States

<https://insideairbnb.com/get-the-data/>

City	File Name	Description
Jersey City	<u>listings.csv.gz</u>	Detailed Listings data
Jersey City	<u>calendar.csv.gz</u>	Detailed Calendar Data
Jersey City	<u>reviews.csv.gz</u>	Detailed Review Data
Jersey City	<u>listings.csv</u>	Summary information and metrics for listings in Jersey City (good for visualizations).
Jersey City	<u>reviews.csv</u>	Summary Review data and Listing ID (to facilitate time-based analytics and visualizations linked to a listing).

Dashboard 1 – Overview



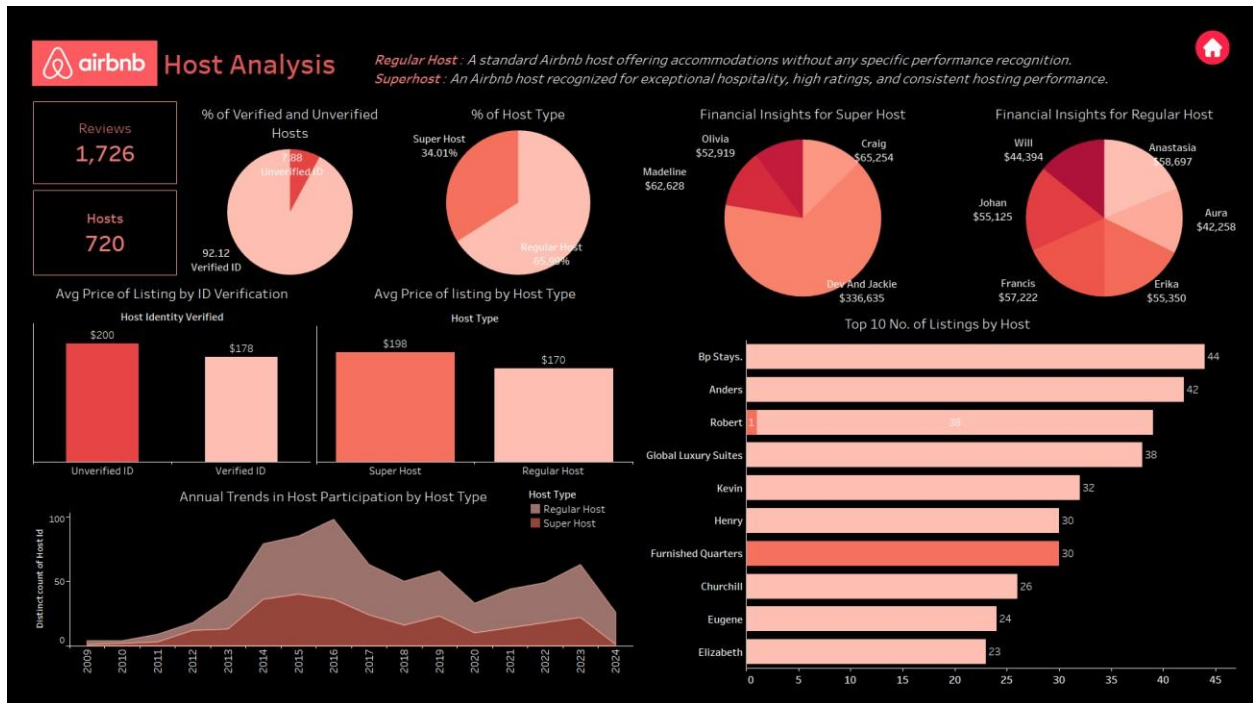
This dashboard provides an overall summary of Airbnb metrics in New Jersey, including total property, hosts, and average prices, alongside trends over the years. The map visualizes spatial distribution, while the bar chart breaks down average prices by room type, offering a clear overview of market dynamics.

Dashboard 2 - Pricing Analysis:



This dashboard focuses on pricing trends across room types, neighborhoods, and time periods, revealing seasonal variations and price drivers. The heatmap offers a weekday and monthly breakdown of average prices, helping identify patterns in booking demand.

Dashboard 3 - Host Analysis



This dashboard examines host performance, distinguishing between superhosts and regular hosts while showcasing financial insights and trends in host participation. The pie and bar charts highlight the importance of host verification and the top contributors to listings, adding depth to host-related metrics.

Conclusion

In conclusion, this project provides a detailed and interactive exploration of the New Jersey Airbnb market, combining key metrics, trends, and spatial insights to uncover factors influencing pricing, host performance, and market dynamics. By leveraging Tableau's visualization capabilities, the dashboards highlight actionable insights for stakeholders, such as identifying high-performing neighborhoods, understanding the impact of host types, and observing seasonal pricing trends. This comprehensive analysis equips decision-makers with valuable data to optimize strategies for both hosts and guests in the competitive short-term rental market.