3 Minute Story of NYC Taxi Data 2021

Our project sponsor, Ydanis Rodriguez, Commissioner of the New York City Department of Transportation, is keen on developing a visualization dashboard that highlights the distinct boroughs of New York City and extracts insights based on different times of the day. The city faces significant challenges such as inefficiently distributed taxis and routes, traffic congestion, and disparities in transportation accessibility, all of which negatively impact commuters. As a globally renowned and densely populated city, NYC grapples with widespread issues including traffic congestion, parking difficulties, and unreliable public transportation.

To address these issues, our sponsor is interested in overseeing and analyzing the flow of traffic across distinct boroughs at different times of the day. The initiative to manage congestion through visually overlooking pricing among trip amount, toll amount and peak charges aims to reduce the volume of vehicles in the most congested areas of Manhattan and other boroughs.

Through our visualizations, we discovered that Manhattan is the borough where the most taxi expenditures occur, with approximately 13 million recorded, followed by Brooklyn at 1 million, and Queens at 900K. Notably, the evening period records the highest number of trips across all boroughs, averaging 35%, followed by afternoon and late-night periods. The trend line showing trip counts has been a crucial element for our sponsor, providing insights into how trends have evolved over highest month, January.

To conclude, we understand and strategize responses to the city's transportation challenges through this dashboard. By analyzing traffic flow and taxi usage across different boroughs and times, effective solutions such as congestion pricing can be implemented to reduce some of the pressing issues. This project not only enhances in immediate decision-making but also contributes to long-term planning for improving the efficiency and reliability of transportation in New York City.