

Title: Improving NYC's Services To 311 Requests.

Overview: NYC receives millions of 311 service requests every year from noise complaints to public safety. However, not all of the requests receive equal attention and treatment. There are inefficiencies and response time disparities across boroughs, complaint types and agencies that need to be identified and addressed.

This project aims to identify insufficiencies in NYC's 311 service response by analyzing historical 311 request data. The main goal is to uncover trends in request volumes and resolution times, highlight undeserved areas and slow-performing agencies and provide actionable insights to ensure resident satisfaction.

Significance: 311 data reflects how effectively a city listens to and serves its residents. By analyzing trends in complaint types, response times, and geographic distributions city planners and agency leaders can make more informed decisions around staffing, resource allocation, and operational workflows.

This project fits into a broader effort to use business intelligence (BI) tools to improve urban governance and accountability. A BI dashboard tailored to city officials will help monitor performance KPIs, visualize service demand geographically and temporally, and highlight improvement areas.

This project will focus on:

- The top 5 complaint types by volume
- 2–3 boroughs
- Measures of performance such as:
 - Average time to close a request

- Total open vs. closed requests
- Most common complaint types by location
- Agency performance breakdown

Data Source: I will use the 311 Service Requests from 2010 to Present.

https://data.cityofnewyork.us/Social-Services/NYC-311-Data/jrb2-thup/about_data. Data will be downloaded in CSV form and cleaned with Python.

The steps that I will be following to complete this project are:

- Data cleaning and wrangling
- Exploratory Data Analysis
- Dashboard development
- Insights and recommendations

Tools to be used:

- Python + Pandas for data wrangling and EDA
- Tableau for dashboarding
- Jupyter Notebook + PowerPoint for reporting and storytelling

Conclusion: Through data wrangling, exploratory analysis, preprocessing, and the development of an interactive dashboard, this project will showcase key business analytics skills and provide practical value to stakeholders responsible for public service delivery.