

Chicago 311 City Service Request Analysis

Business Use Case:

The City of Chicago introduced a new 311 non-emergency line in December of 2018 to provide Chicago residents with a system to request services including street repairs, sanitation concerns, and streetlight outages, to name a few. This system generates a substantial amount of data regarding different communities' needs and the City Services demands. However, due to the large request volume, the 311 City Services Department and the City of Chicago often face challenges in responding promptly to the service requests, especially in Chicago neighborhoods with limited resources. Therefore, through analyzing the 311 service request data, the city departments can more effectively prioritize and allocate resources to improve response times.

The City of Chicago and the 311 City Services Department wants to enhance the efficiency and effectiveness of its service response operations through reducing response times, addressing community needs, and improving the overall service delivery. Through the use of the 311 Service Request dataset, the city wants to identify trends and patterns to aid the City of Chicago and its departments in informing smarter resource allocation, prioritize high-need areas, and anticipate demand. This will be accomplished through the below proposed analysis.

Potential analysis:

- Analyze the trends of different types of services requested by Chicago residents per month, season, or year to see what services are being requested repeatedly.
- Evaluate the efficiency of request handling through utilizing the ticket creation and ticket closed dates.
- Improve customer service by identifying which tools of communication (e.g. phone, internet) are used frequently to request services by Chicago residents.
- Visualize the geographic distribution of requests across neighborhoods to understand the locality of service requests.

Data Source:

You can use any data from the City of Chicago's publicly available datasets for 311 Service requests:

https://data.cityofchicago.org/Service-Requests/311-Service-Requests/v6vf-nfxy/about_data