

Based on the available data from our first team meeting, we picked up the 311 service requests dataset to get started and performed a preliminary analysis on it. In the subsequent sprints, we will have a merged dataset after completing data review for all categories and metrics.

Dataset Description -

The dataset contains records of 311 service requests made by residents in District 7. Each record contains fields such as the Case ID, type of service requested, location, status of the request, address from where the request was made and source of the request. The dataset is rich for analysis and also includes geospatial information like the latitudes and longitudes of neighborhoods and districts, allowing scope for spatial analysis.

What questions were answered by analyzing the data?

We were able to analyze datasets with records from the years 2023 and 2024, and the following questions can be answered based on the insights:

1. Number of outstanding and completed requests
2. Identifying the sources of service requests
3. Number of D7 app downloads vs newsletter subscription
4. Spatial Analysis of open and closed requests via a Heatmap

What questions could not be answered with the given data?

Specific Causes for service requests could not be determined with the given data. For instance, if we have a spike in garbage removal requests in a certain area, identifying the cause behind it is not feasible with the data. In terms of understanding civic engagement, direct feedback from the residents for each case would help assess their satisfaction levels better. Including this type of data could provoke a deeper level analysis of resident welfare in District 7.

What other data sources are required according to the project description?

We are required to analyze data across four broad categories - Education, Public Health, Public Safety and Environmental Justice. After doing a data review based on the available resources, we were not able to gather data for certain metrics to answer questions pertaining to Environmental Justice and a few from the census data tract. Moving forward, we aim to communicate these to the PM and TPM and finalize the datasets and sources for analysis in the upcoming sprints.