

Project

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Austin - 311 Unified Data (Utilities and City Services)

"Non-emergency 311 call systems, used increasingly in U.S. cities, offer a number of advantages. They give citizens a quick, convenient way to kvetch about problems in their neighborhoods, and get a response."

Pattern of Service Type by

- Month
- Owning Department
- Methods

Mainly use SQL, plotting charts in Plotly

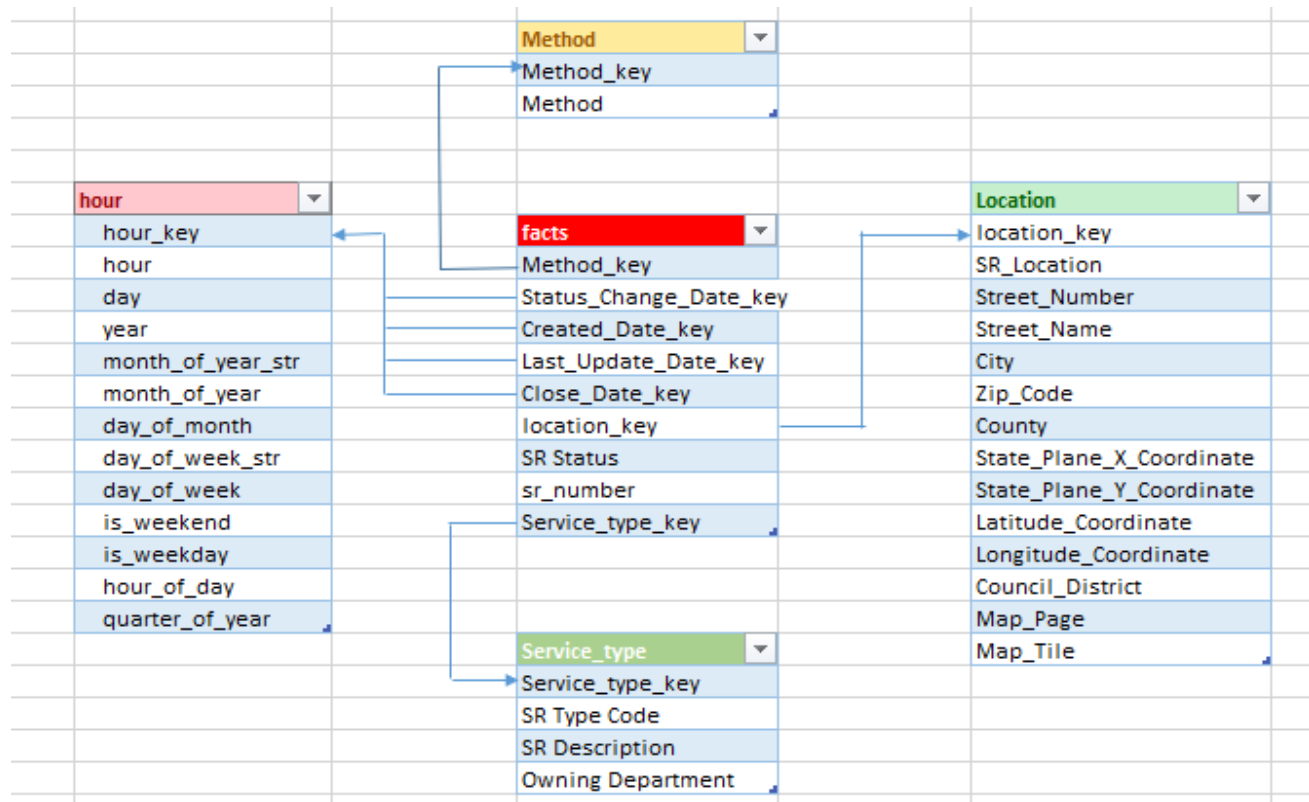
● Utilities and City Services

- Data size: 160 MB, 344,794 Rows, 24 columns
- City: Austin, Texas
- Duration: 01/03/2014 to present
- Each row is one piece of city service request transaction
 - Basic info of Service (SR number, Owning Department, etc.)
 - Location info (geographic coordinates, ZIP code, etc)
 - Time Info (Created Date, Close_Date, etc.

● Data Wrangling

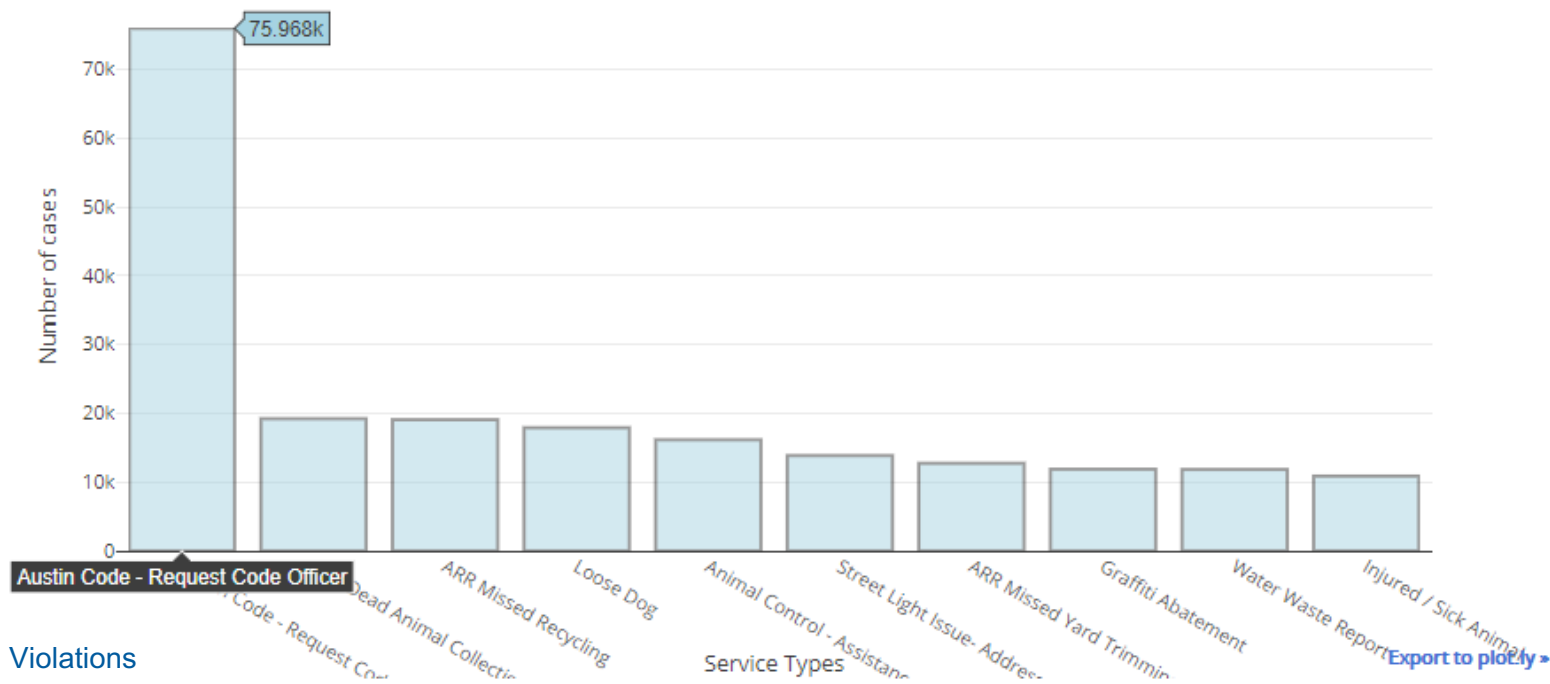
- Relative clean without missing value
- Pandas
 - Retype
 - Import into PostgreSQL

Star Schema

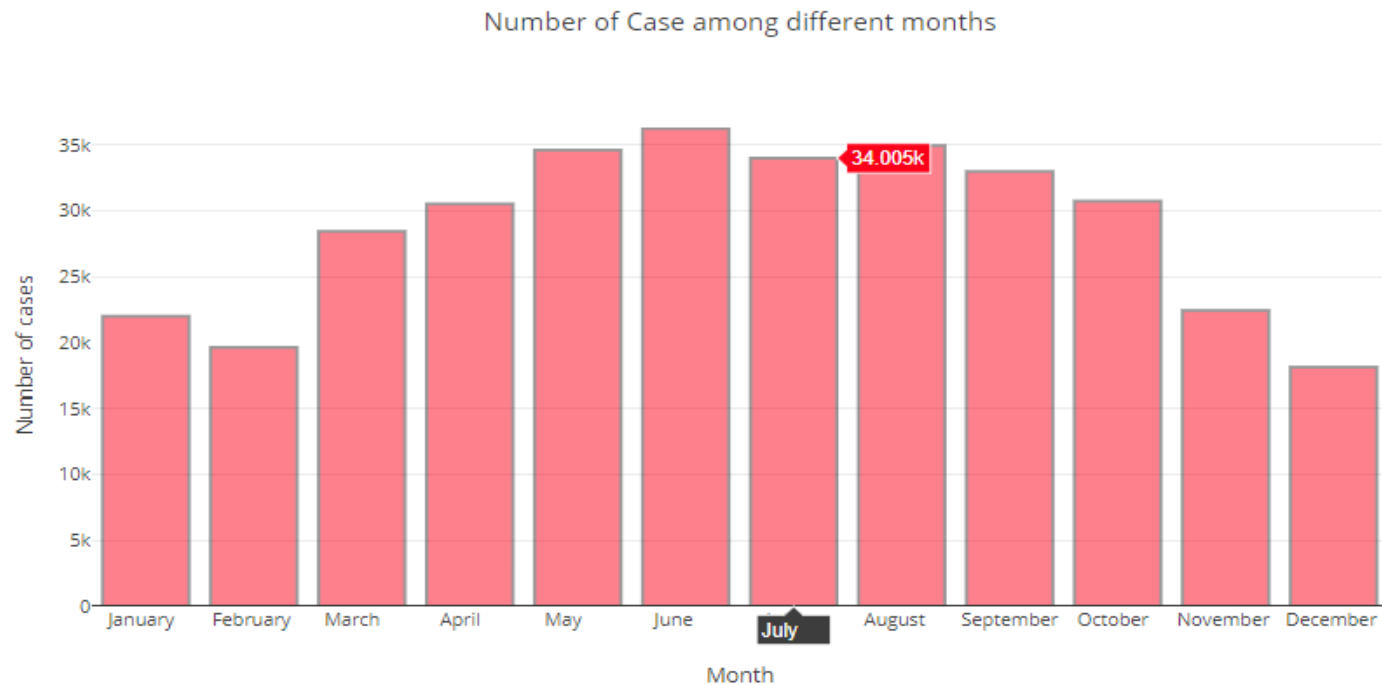


Overview

Service Types in Total (From 2014-2017)

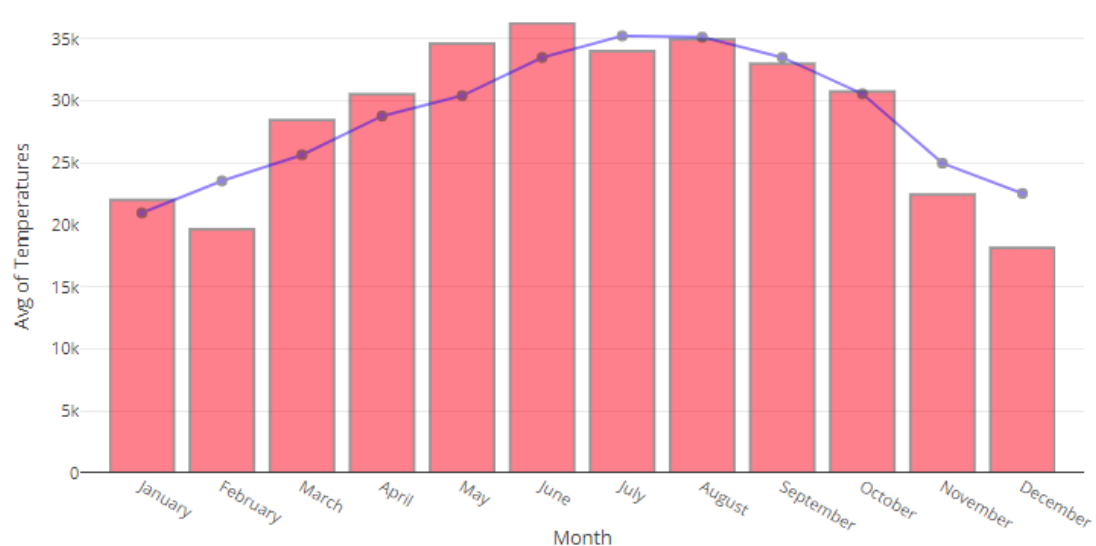


Cases by months

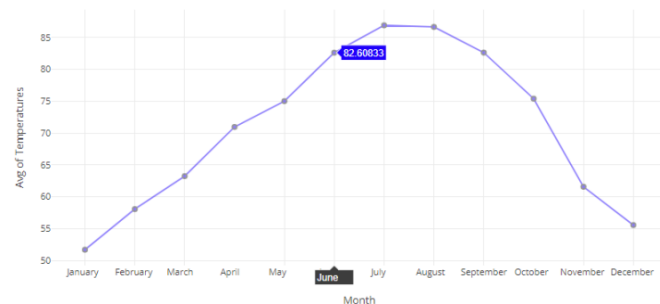


Augment: Temperature

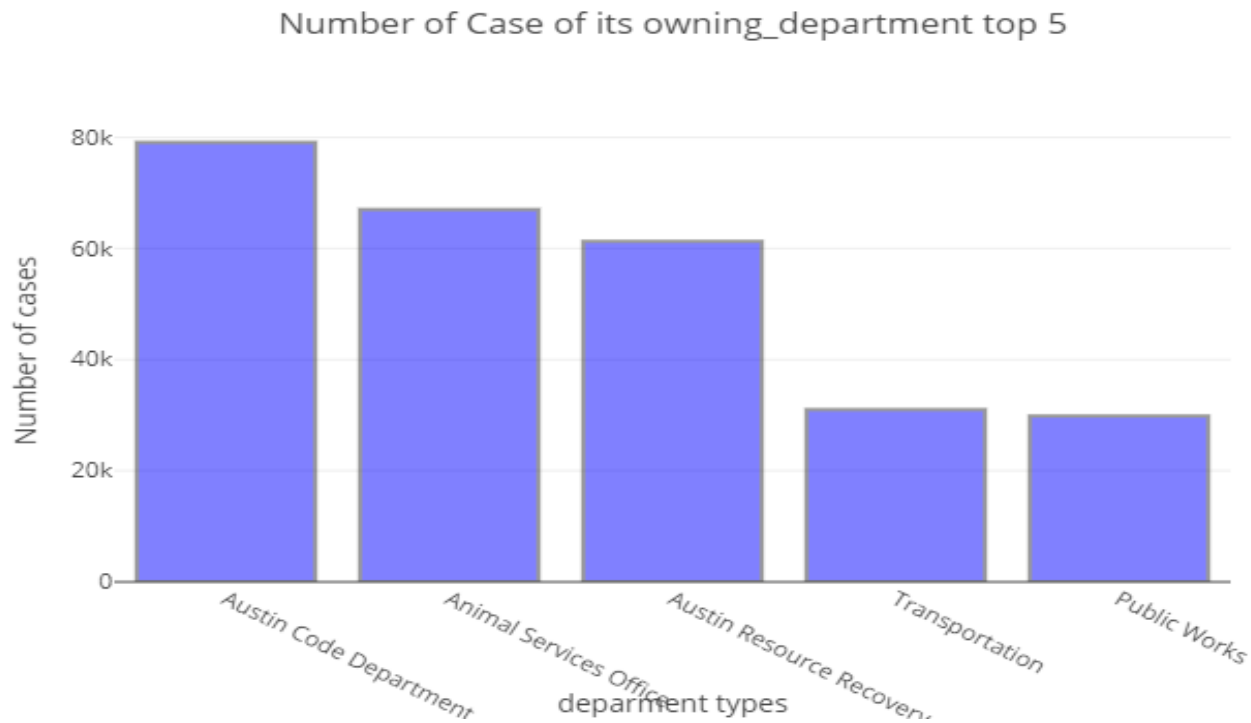
Avg of Temperatures among different months



Avg of Temperatures among different months

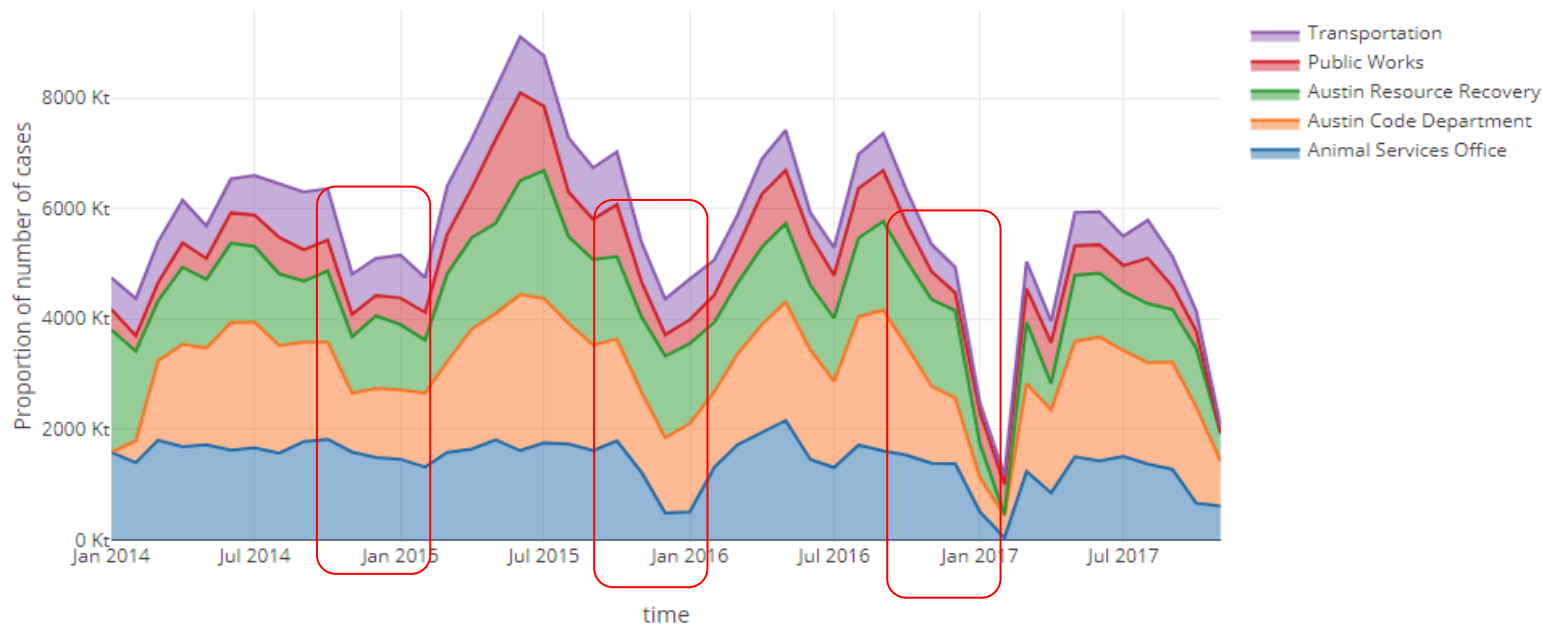


Cases by Owning department



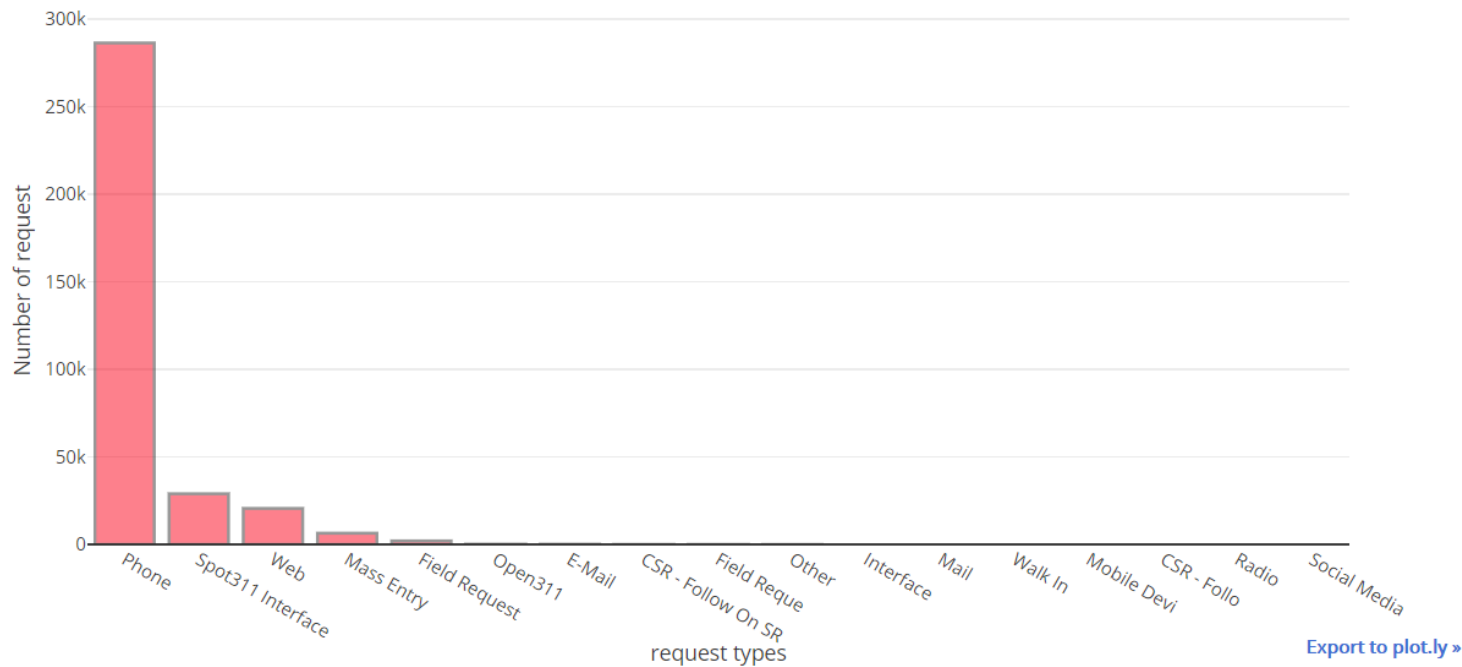
Numbers of cases by department

Proportion of number of cases, 2014-2017



Numbers of cases by methods

Numbers of ways of request



Thank you!

Data Source:

<https://data.austintexas.gov/Utilities-and-City-Services/311-Unified-Data/i26j-ai4z>

<https://www.kaggle.com/grubenm/austin-weather/version/2/data>

