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)
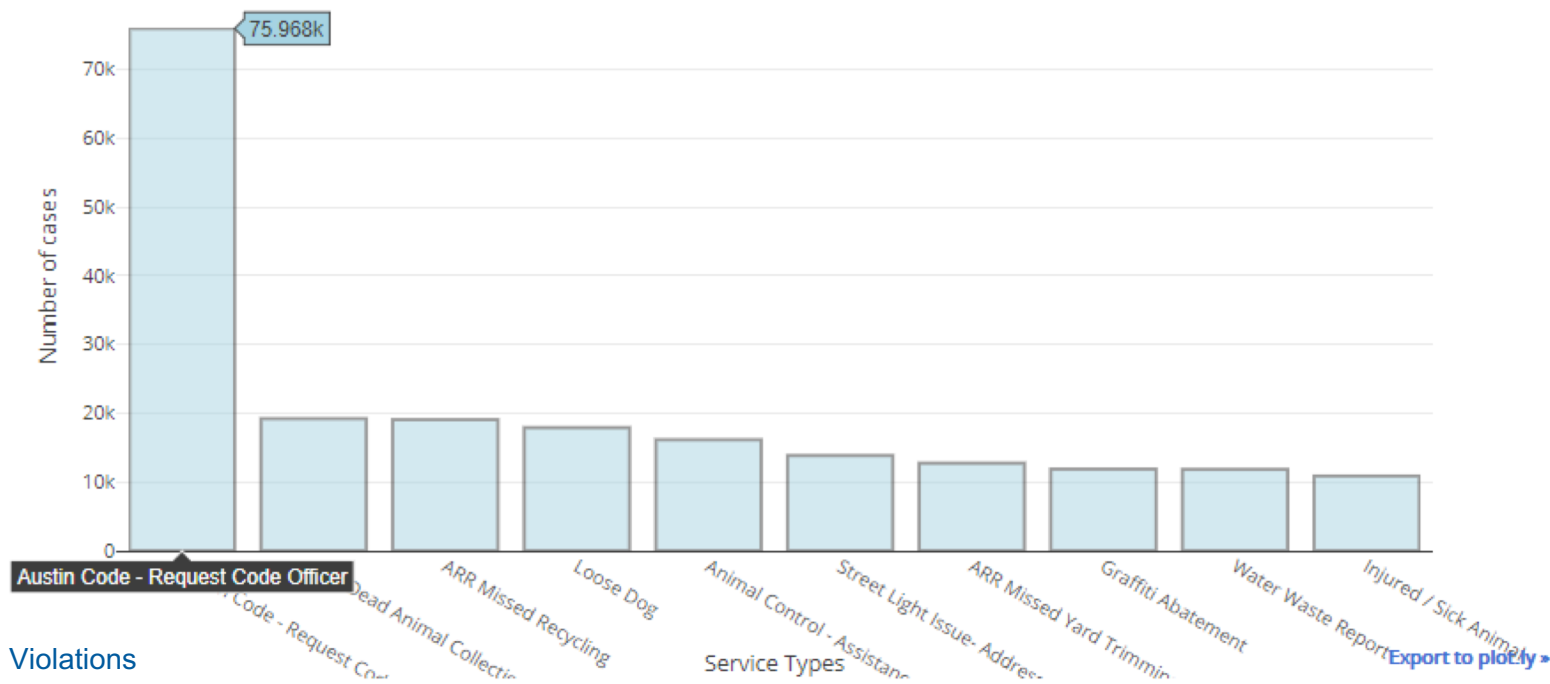   - Time Info (Created Date, Close_Date, etc.

- ## Data Wrangling
  - Relative clean without missing value
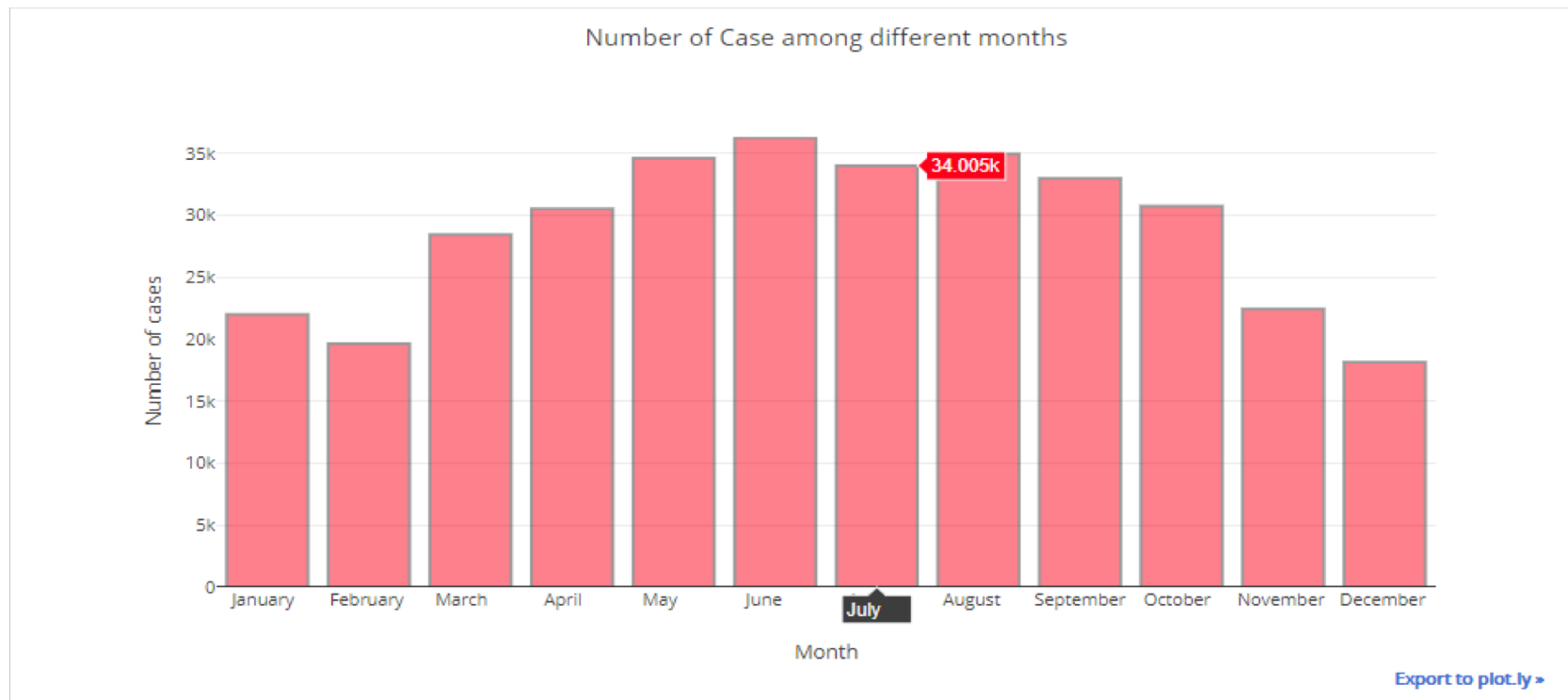 - Pandas
    - Retype
    - Import into PostgreSQL

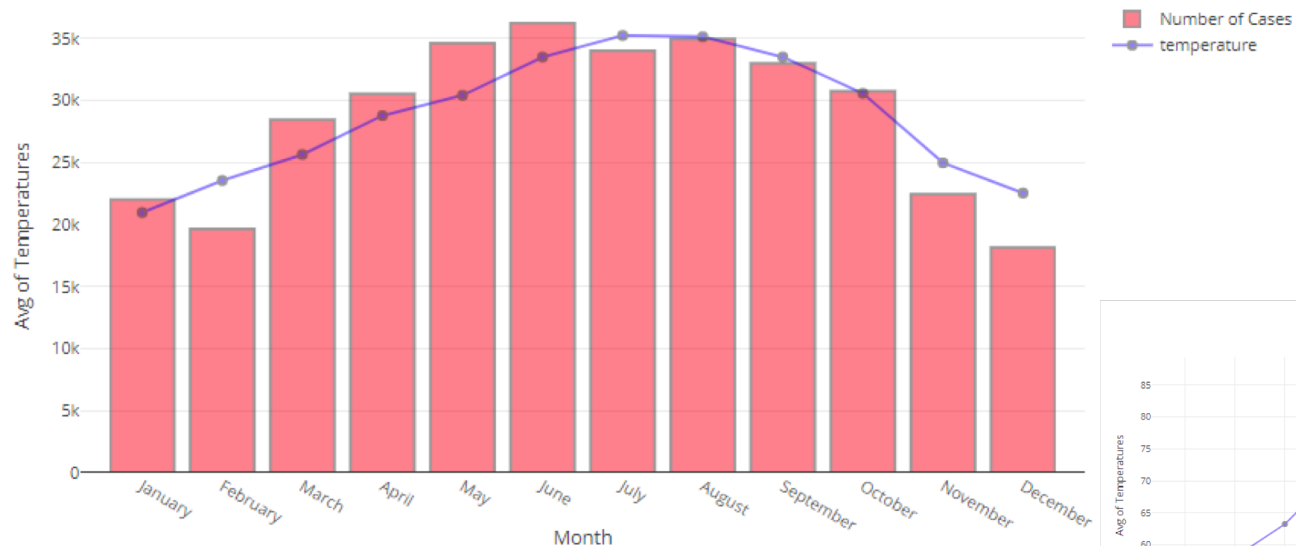# Star Schema
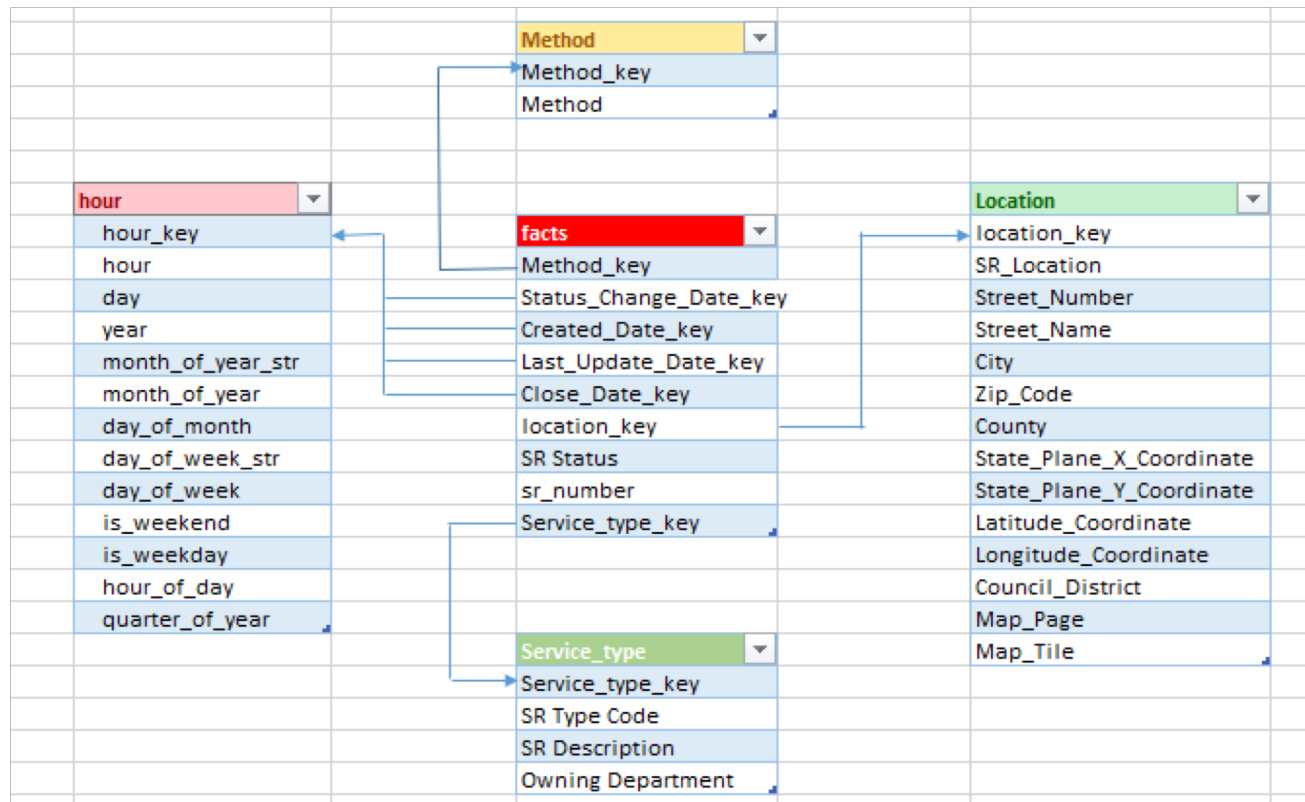
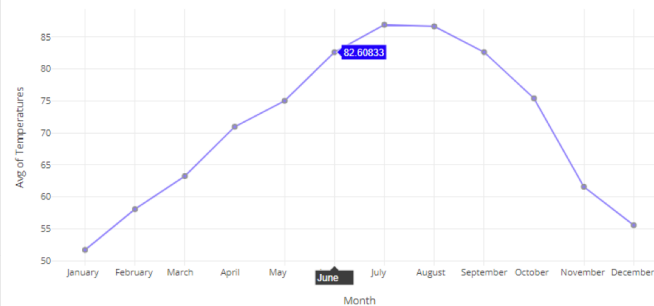# Overview

Service Types in Total (From 2014-2017)

Austin Code Violations

Cases by months

Number of Case among different months

Augment: Temperature

Cases by Owning department

Number of Case of its owning_department top 5
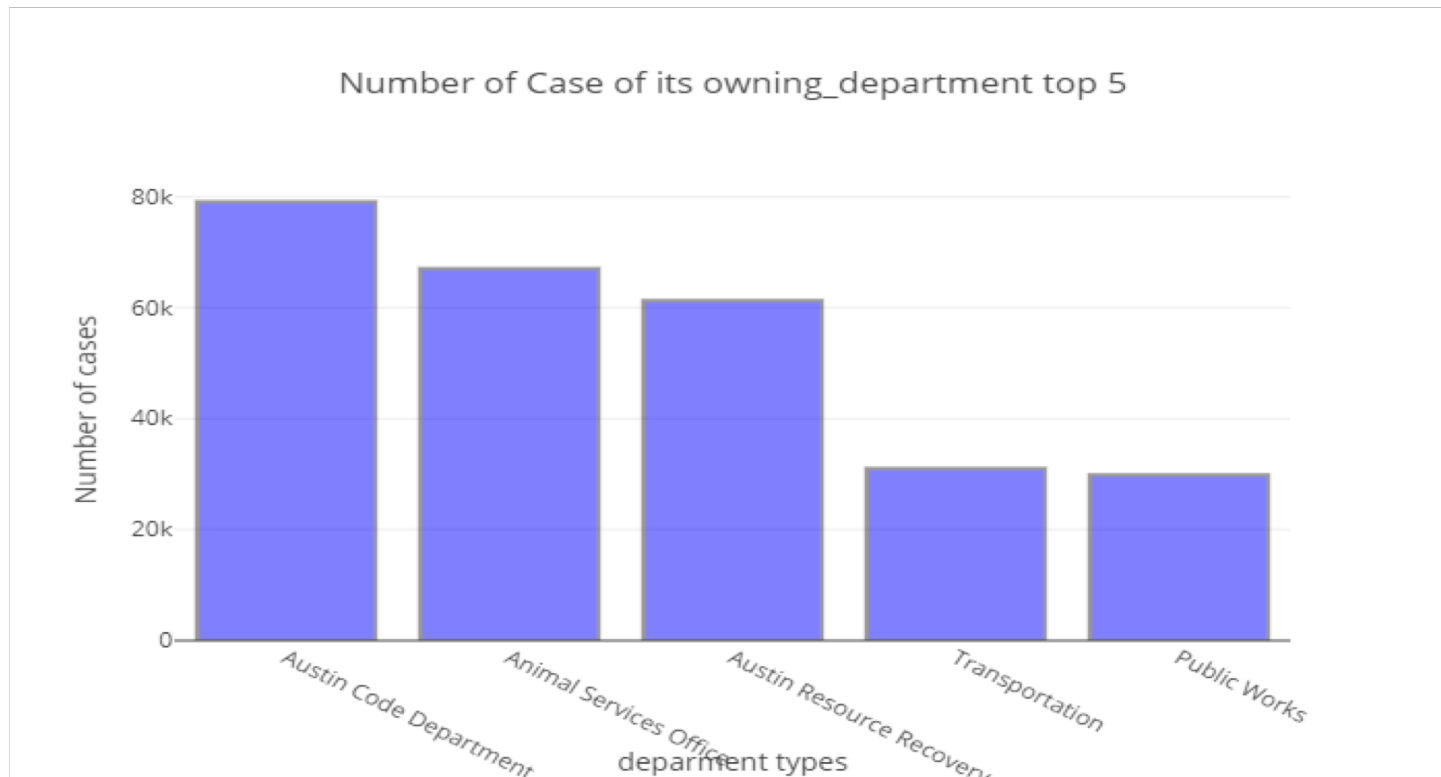
Numbers of cases by department

Proportion of number of cases, 2014-2017

Legend:
- Transportation
- Public Works
- Austin Resource Recovery
- Austin Code Department
- Animal Services Office

y-axis: Proportion of number of cases (0 Kt, 2000 Kt, 4000 Kt, 6000 Kt, 8000 Kt)

x-axis: time (Jan 2014, Jul 2014, Jan 2015, Jul 2015, Jan 2016, Jul 2016, Jan 2017, Jul 2017)

Export to plot.ly »

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