NYPD Motor Vehicle Collisions Project

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DATA SOURCE

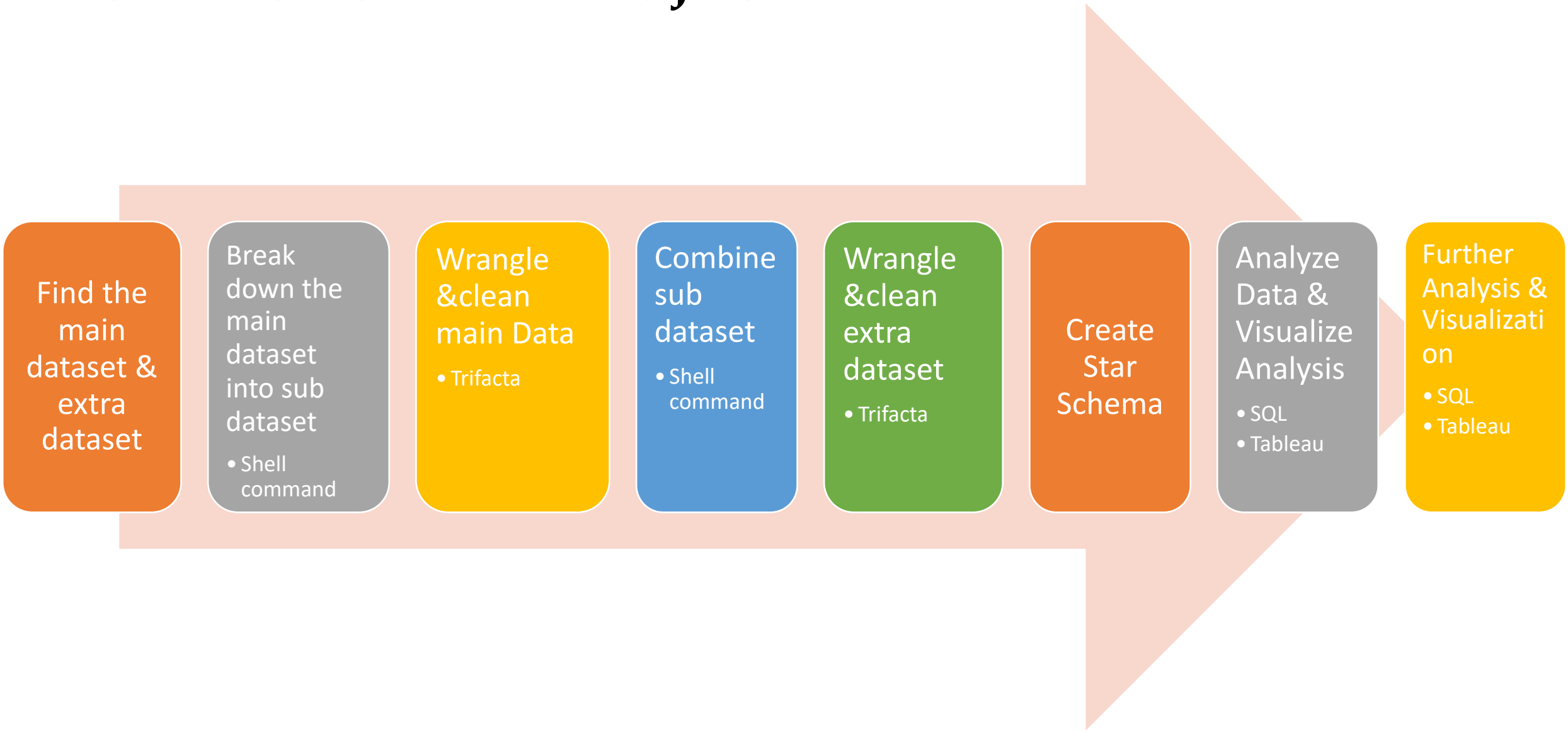
- **Data description**

The dataset comes from the NYC open data website. This is a breakdown of every collision in NYC during Year 2012 to 2018. The dataset is originally containing 1.38 million records. Each record represents a collision in NYC by city, borough, precinct and cross street. This data can be used by the public to see how dangerous/safe intersections are in NYC.

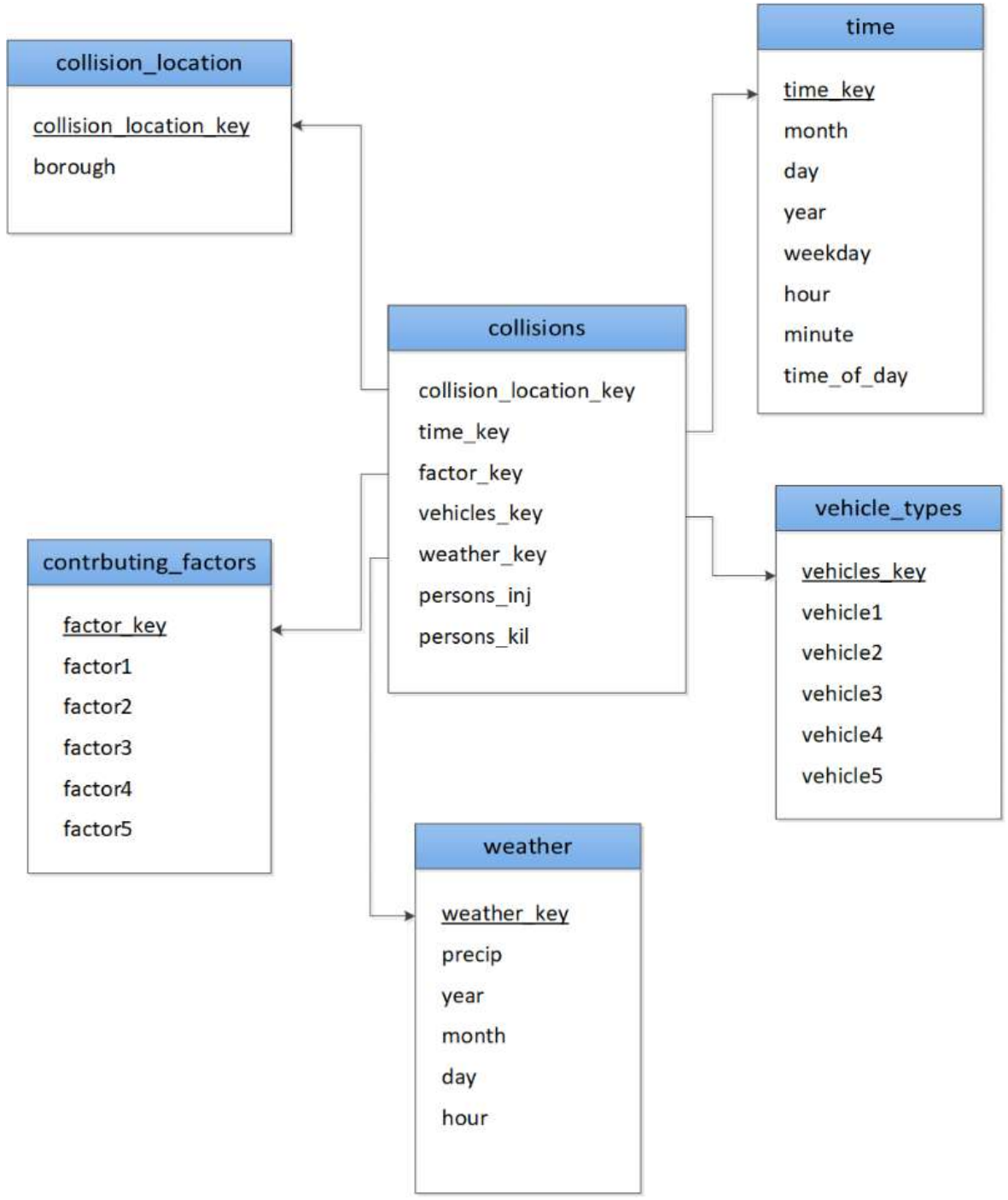
- **Variables of interest**
  - Date
  - Time
  - Borough
  - Number of persons injured
  - Number of persons killed
  - Contributing factors
  - Vehicle types

https://en.wikipedia.org/wiki/New_York_City_Police_Department

A GLANCE OF THE PROJECT



STAR SCHEMA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time
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month
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time_of_day
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time_key
factor_key
vehicles_key
weather_key
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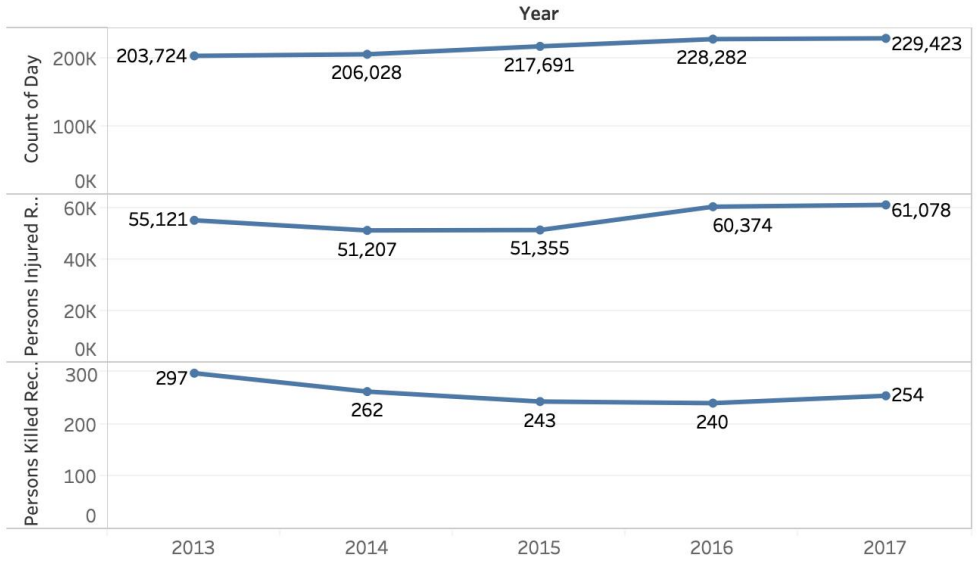
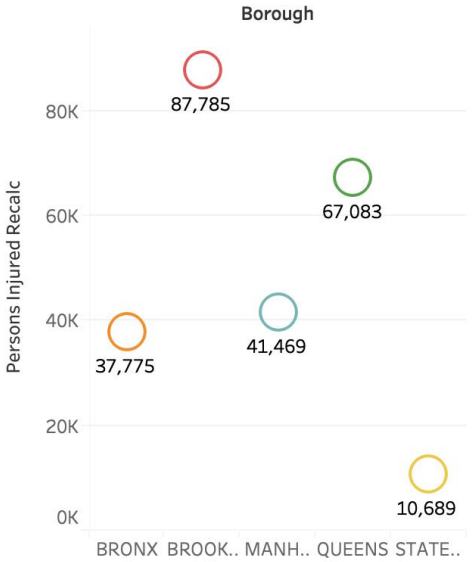
Overall Collisions Analysis

year case

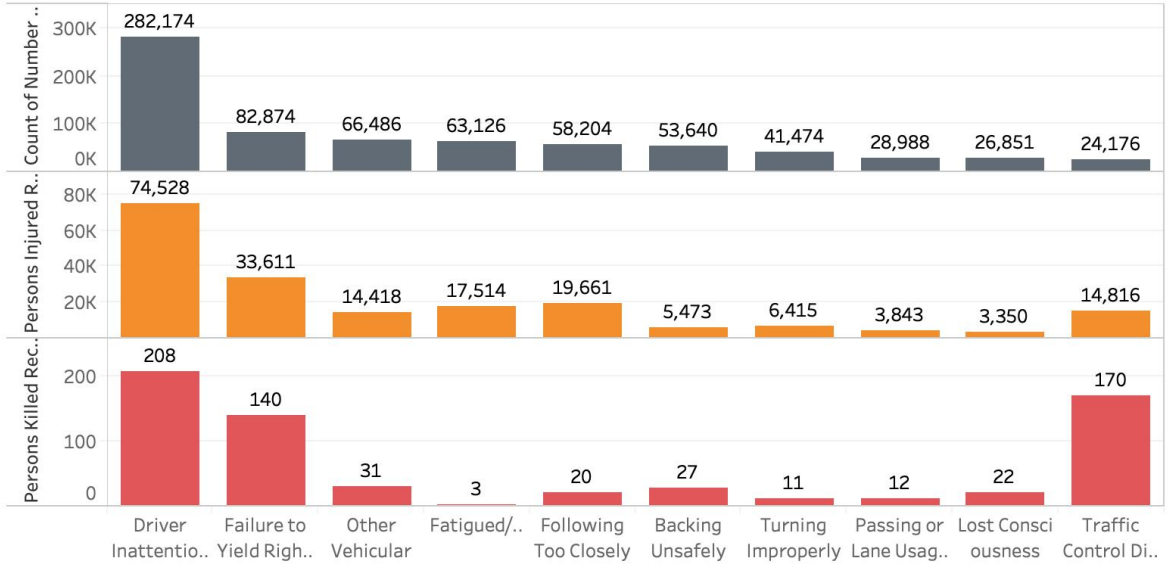


Injured vs. Borough

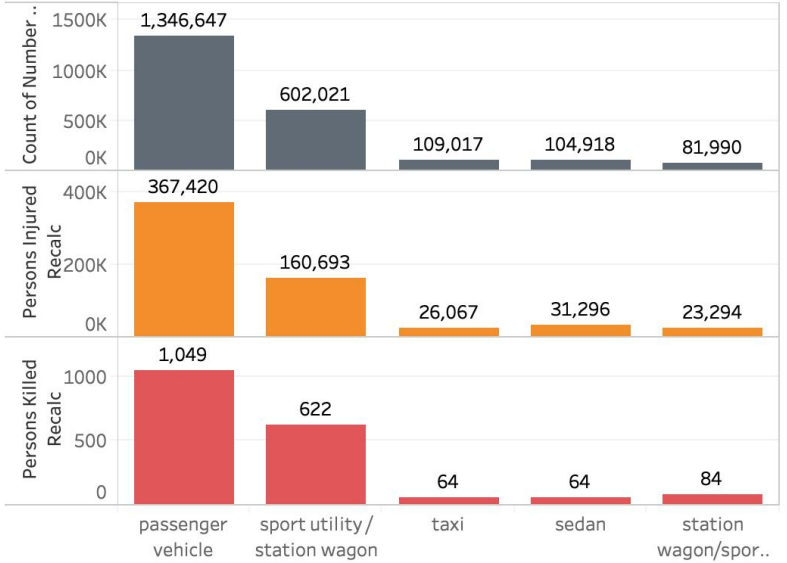


Killed vs. Borough

TOP 10 Contributing Factor

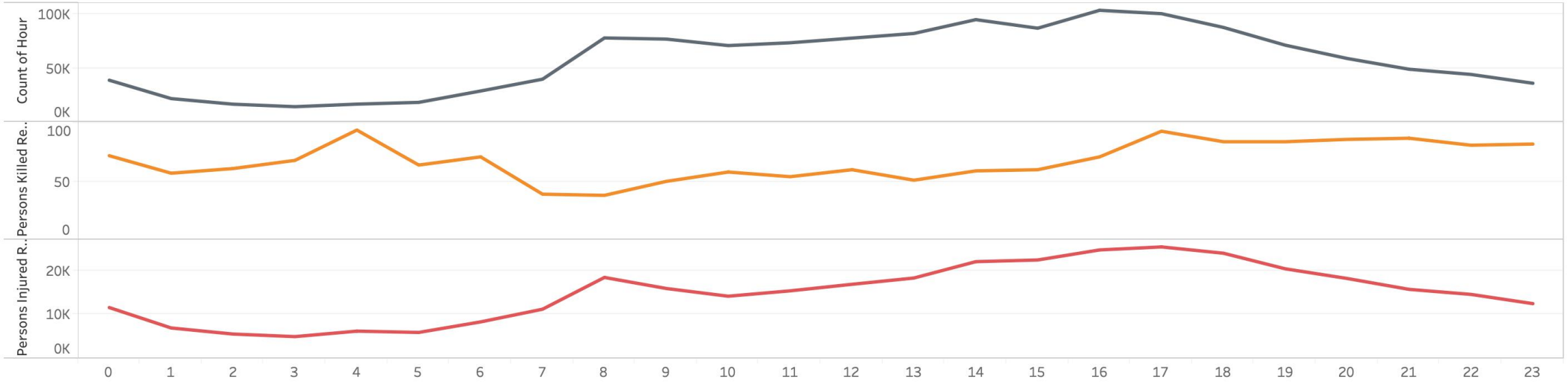


TOP 5 Vehicle Type

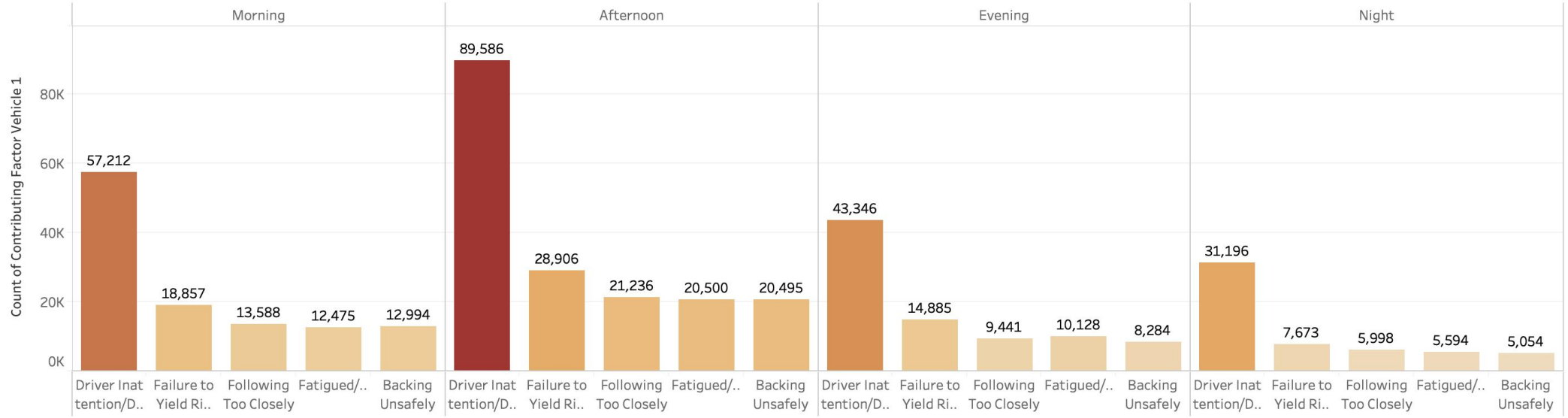


Does time relate to collisions?

Trend of Collisions based on Day time

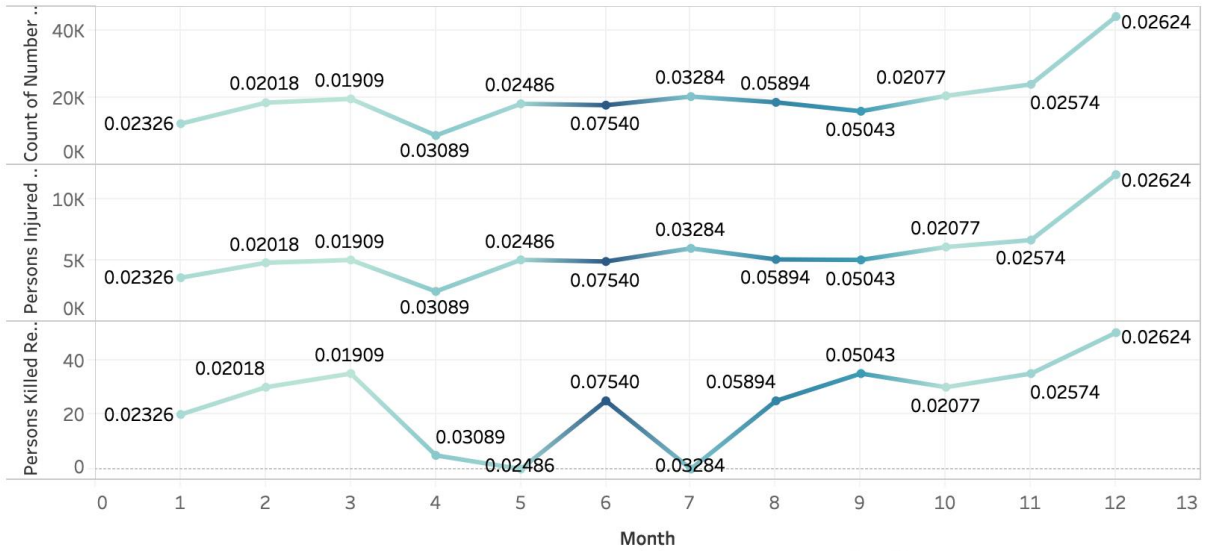


Time of the Day vs. Contributing Factors Analysis

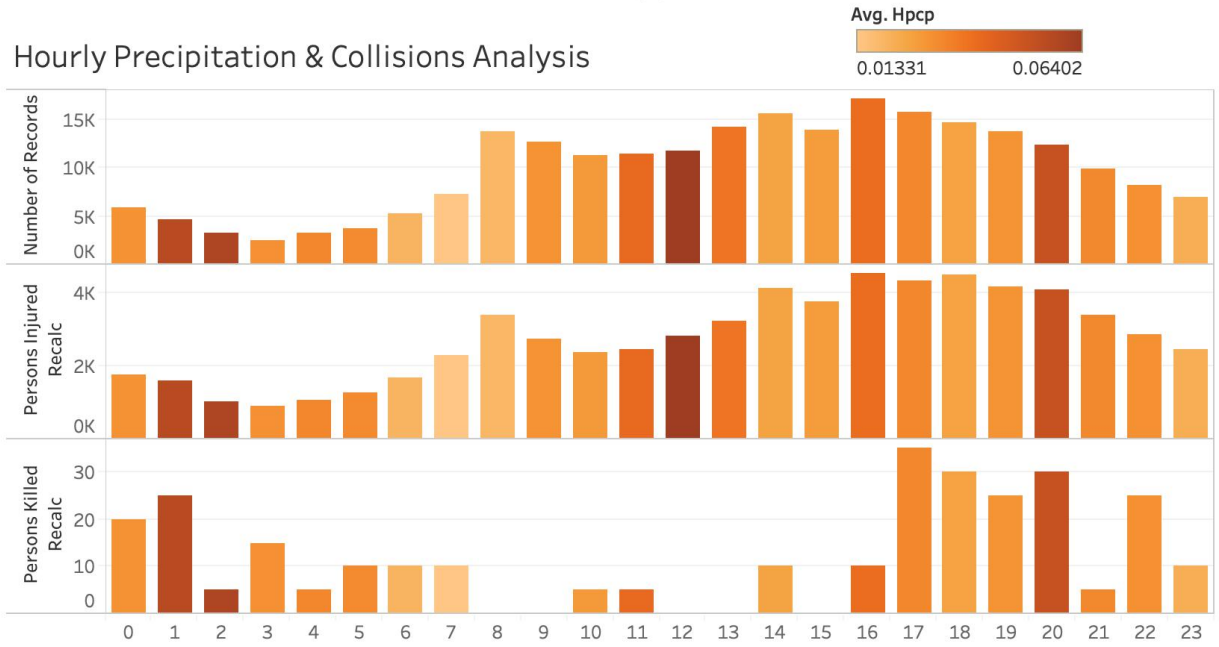


Is precipitation a causal factor of collisions?

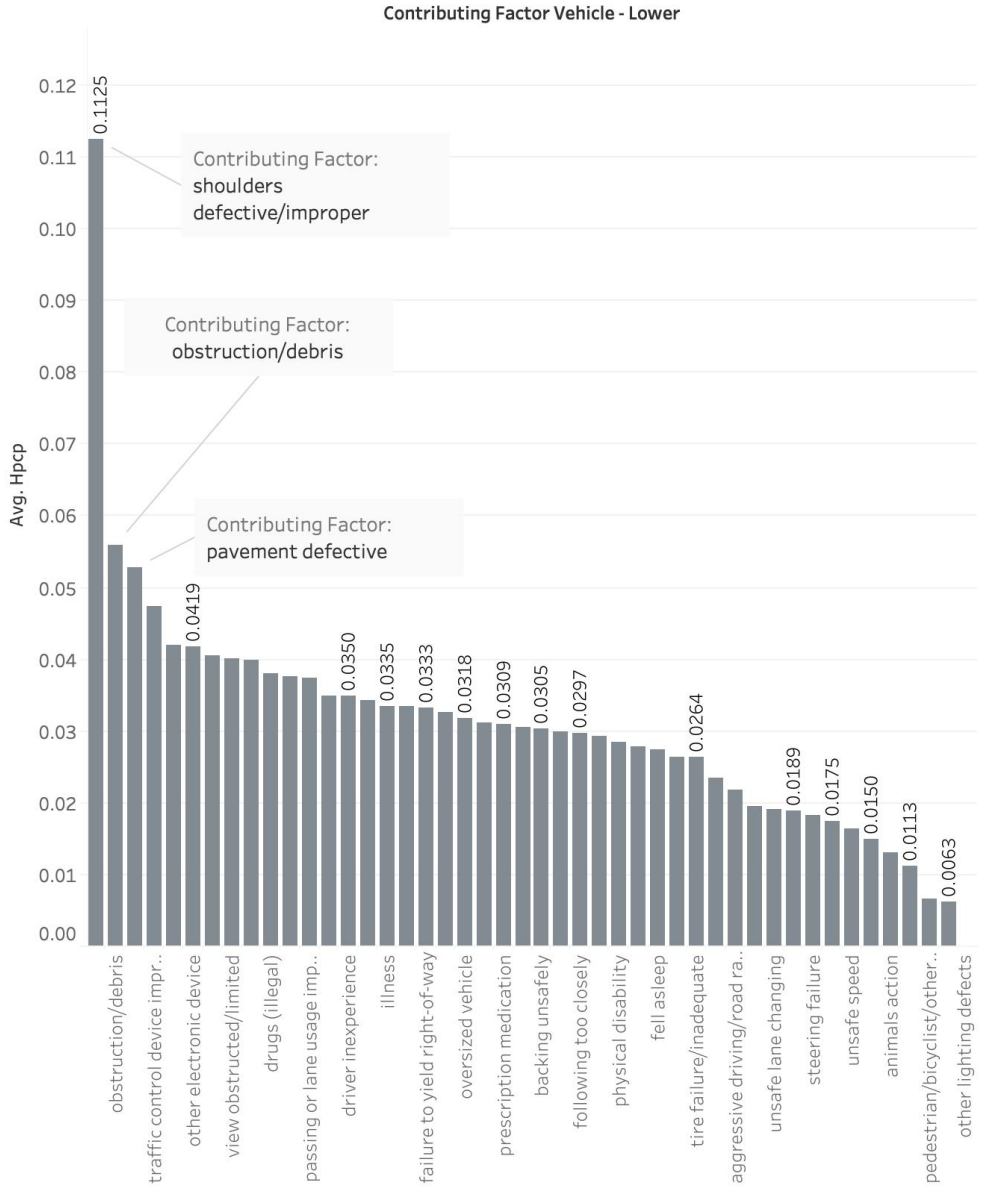
Monthly Precipitation & Collisions Analysis



Hourly Precipitation & Collisions Analysis



Precipitation & Contributing Factor Analysis



Achievements and Challenges