



# US ACCIDENTS DATA ANALYSIS PROJECT

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## OBJECTIVE

- Find out the car accidents hotspot locations in USA and find the impact of precipitation or other environmental stimuli on accident occurrence.

## Data Description

- This Data Set Contains 1.5 Million Records in this dataset.
- This is a countrywide car accident dataset, which covers 49 states of the USA.
- The accident data are collected from February 2016 to Dec 2020.
- 47 columns were presented in this dataset

## ASK THE RIGHT QUESTIONS FOR DATA ANALYSIS

1. Are there more accidents in warmer or colder areas?
2. Which 5 states have the highest number of accidents? How about per capita?
3. Does New York show up in the data? If yes, why is the count lower if this the most populated city.
4. Among the top 100 cities in number of accidents, which states do they belong to most frequently.
5. What time of the day are accidents most frequent in?
6. Which days of the week have the most accidents?
7. Which months have the most accidents?
8. What is the trend of accidents year over year (decreasing/increasing?)
9. When is accidents per unit of traffic the highest.

# Insights

1. california state accidents is very high as compared to other states

CA(California) - 4,48,833 (no of accidents happened in California)

FL(Florida) - 1,53,007

OR(Oregon) - 87,484

TX(Texas) - 75,142

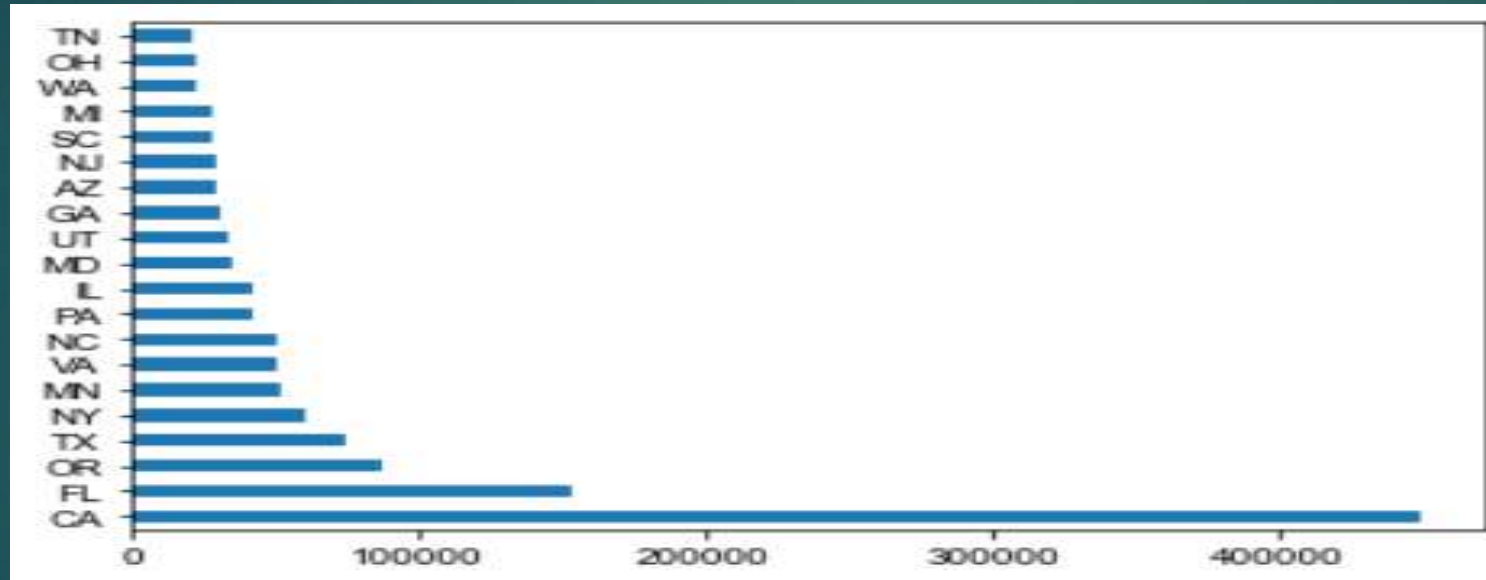


Fig. 1. States by Accidents

## 2. city by accidents

- Los Angeles city in California more than 40,000 accidents happened.
- Miami city in Florida nearly 36,000 accidents happened.

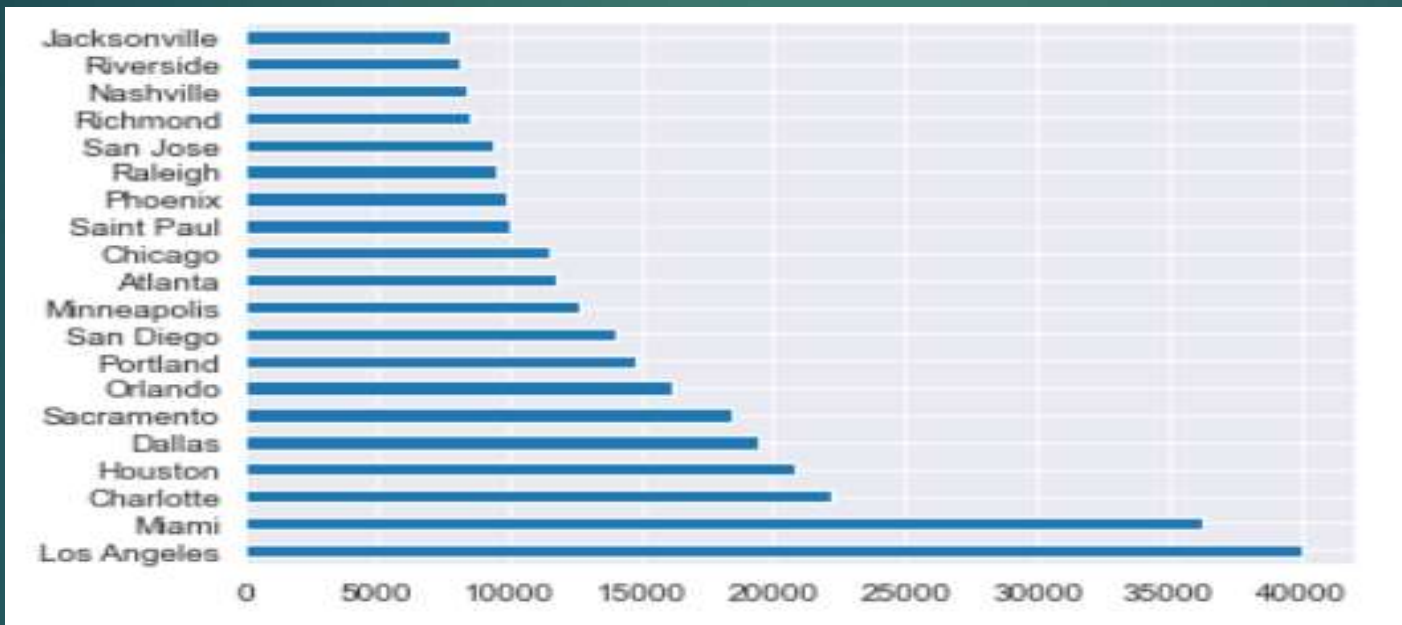
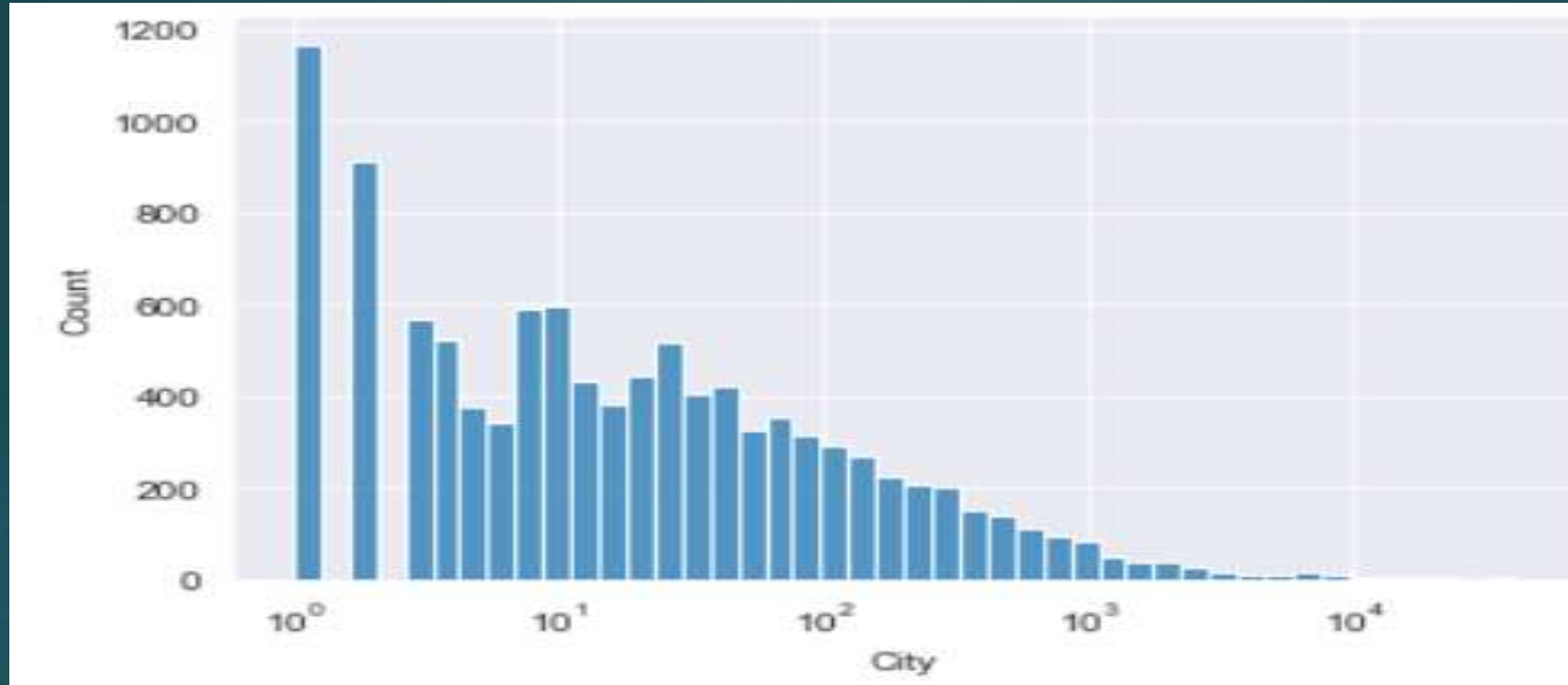


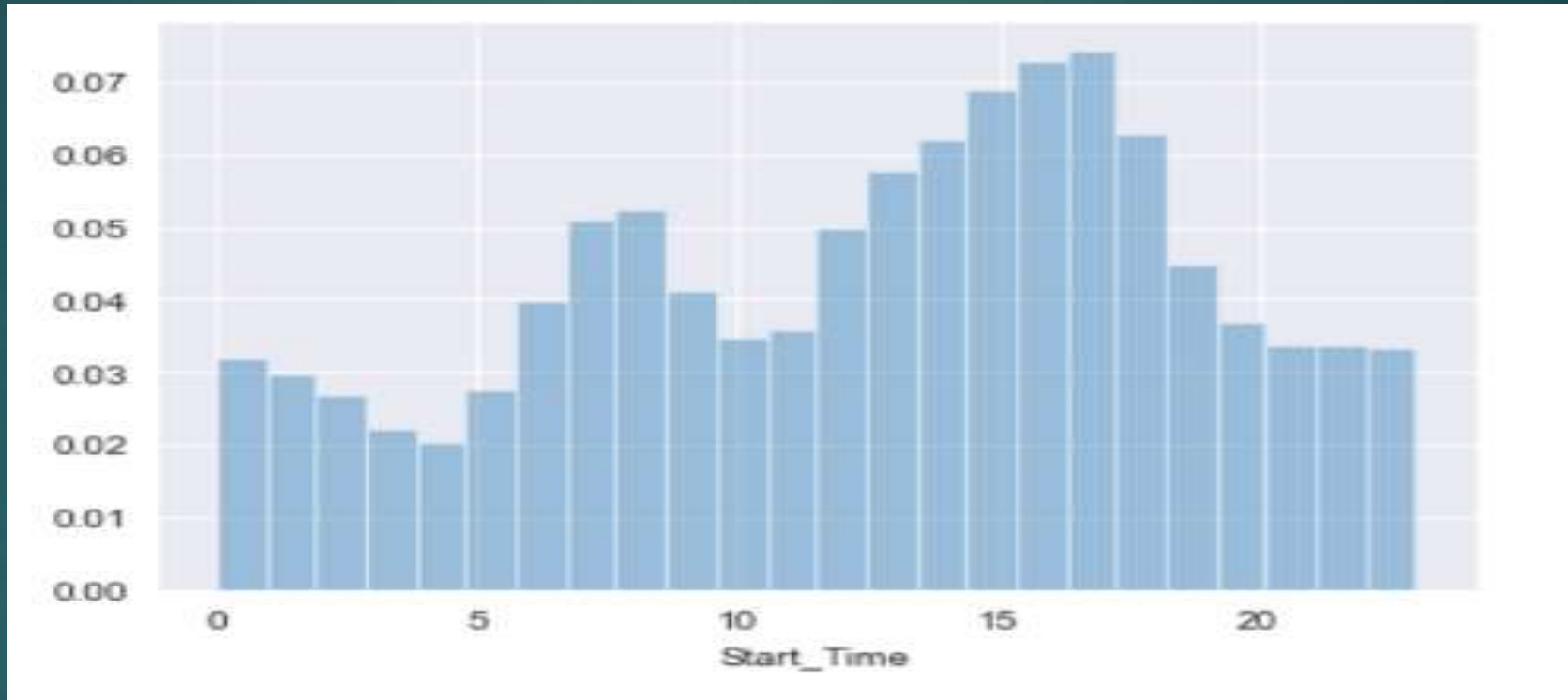
Fig.2, City by accidents

- Most of the accidents were happened between 0 to 100 accidents



**Fig.3, Number of accidents happened between 0 to 100**

- *A high percentage of accidents occur between 12 pm to 4 pm*
- *Next highest percentage is 5 am to 10 am (probably people hurry to get to work).*



*Fig.4, High percentage of accidents happened in Time*

## CONCLUSION

- No data from New York
- The number of accidents per city decreases exponentially
- Less than 2% of cities have more than 1000 yearly accidents.
- 97% of cities have less than 1000 yearly accidents.
- Over 1167 cities have reported just one accident (need to investigate)