Introduction

Background

- The Seattle Police Department publishes a record of 136,485 **collision accidents** which happened in Seattle from 2004 to 2020.
- To gain **insights** from the tabular data, some exploratory data analyses are needed.
- Some **machine learning** models may also be applied to mine the data and gain more valuable information.
- The information may help the Seattle government plan and execute effective **policies** in order to reduce the severity and the number of potential collision accidents in the future.

The significant questions

In order to achieve the goals, some questions need to be addressed and answered:

- What **insights** can be obtained from the data by exploratory data analysis and data visualization?
- Which **classification** model is best for predicting the severity status of an accident?
- Can the accident data be **segmented** to identify which features lead to high collision accident frequency?