

## **Business Understanding:**

Based on data given, Seattle has experienced a 194673 road accidents in the past 16 years. which caused: death & injured 157943 persons, 265233 damaged vehicles, and 679 damaged bicycles. Our target in this study is to determine the most reasons of road accidents, and prediction to save lives & properties, which considered a responsibility of all audiences; local government, citizens, and police department.

## **Data Understanding:**

The data was collected by the Seattle Police Department and Accident Traffic Records Department from 2004 to May 2020. The data contain 38 columns, and 194673 rows. The dependent variable is "SEVERITYCODE". and 37 attributes. It contains some attributes not important to this study, which gives more description of accidents. For example "SDOTCOLNUM", "X", "Y", "INCDTTM", "INCDATE", "REPORTNO", "COLDETKEY", "INCKEY" and "OBJECTID". Moreover, "EXCEPTRSNCODE", "EXCEPTRSNDESC", "PEDROWNOTGRNT", "SPEEDING", "INATTENTIONIND", have a high number of missing data that would skew and bias our predictive model.