**CHAPTER 1: INTRODUCTION**

This study provides a comprehensive analysis to car accident severity problem in Seattle city. Car accidents might not only affect those who are involved in a car crash physically, emotionally and financially, but also affect others by causing traffic delay. The National Highway Traffic Safety Administration [1] reported the total number of fatalities in car accident crashes increased from 41,945 to 36,560 starting from year 2000 to 2018. This is an enormous increase and we aim to address this issue in this study.

The objective of this study is to develop a model that could predict the severity of car accident given by the factors affecting the collision. These factors are not restricted to road and visibility and weather condition. However, we will identify the number of significant effective factors and develop a model which is able to predict the severity of accident in the Seattle city.

The developed model could assist users with the required information on road traffic and the possibility of getting into a car accident. Furthermore, the users would know how severe the accident would be. Therefore they are able to make decision in advance prior to the travel. It potentially will result in reduced number of motor vehicle crashes, injury and fatality rate.

**REFERENCES**

[1] National Highway Traffic Safety Administration (NHTSA). (2020). Traffic Safetey Facts Annual Report. <https://cdan.nhtsa.gov/tsftables/Fatalities%20and%20Fatality%20Rates.pdf>