INTRODUCTION

BACKGROUND: In the modern world road traffic accidents are very common in each and every part of the world. Seattle is one the busiest cities and as of 2017, there have been more than 11,000 motor vehicle-involved **collisions** per year. These collisions not only lead to high property damage but may result in injuries and in worst case scenarios even death. In 2017,a total **of** 187 fatal and serious **injury collisions** were reported on **Seattle** streets . The causes behind the collisions may range from physical factors like road conditions, lighting, weather, time of day etc to human factors like inattention, speeding, under influence. Various efforts and steps can be taken in order to minimize these collisions. Every city has devised certain traffic rules and regulations to help in this regard. Even WHO has given certain recommendation to be followed by the government agencies to have an impact on the rate collisions and more importantly to reduce the cost of property damage as well as of life. Even small regulations sometimes have much greater impact.

PROBLEM: To predict the severity of collision based on the various physical and human factors. And make recommendations and take necessary efforts based on those predictions like improving the road conditions, lighting, regulations on speed in various area etc.

STAKEHOLDERS: General Public

Seattle Traffic

Car manufacturing industry.

Weather department

DATA.

Data utilized for this analysis was downloaded from Kaggle seattle collision dataset as csv file.

http://data-seattlecitygis.opendata.arcgis.com/datasets/5b5c745e0f1f48e7a53acec63a0022ab\_0.csv

the dataset include data regarding the severity of collisions and various parameters associated with it in the city of seattle from year 2004 till now.