

Road traffic injury is a serious problem and road safety is one of the major concerns. According to WHO[1], a road injury ranked in 8<sup>th</sup> in the cause of death in 2016. Even though those who had accidents survive, they may be left with physical or psychosocial disabilities. In addition, road accidents lead to financial loss. This is estimated at about US\$518 billion per year[2]. To minimize damage to people and reduce economic loss, we need to analyze past data and know factors.

The purpose of this article is to analyze data about traffic collisions in Seattle and make suggestions to reduce the number of traffic accidents. If some regularities are found, it is easy to take measures against accidents. In this report, I would like to show what surrounding conditions such as weather condition, road condition and light condition are associated with the severity of the accidents mainly.

This report is useful for drivers, local residents and administration. From the drivers and local residents' perspective, the result led from data analysis will change the public awareness. From the viewpoint of administration, if we know the conditions that are likely to cause accidents, we can carry out patrols more efficiently. Furthermore, data analysis will be helpful when making a city plan to avoid traffic accidents.

[1]<https://www.who.int/news-room/fact-sheets/detail/the-top-10-causes-of-death>

[2][https://www.who.int/violence\\_injury\\_prevention/publications/road\\_traffic/world\\_report/chapter2.pdf](https://www.who.int/violence_injury_prevention/publications/road_traffic/world_report/chapter2.pdf)