

Introduction/Business Problem

Since 2004, in the city of Seattle there have been 219,547 vehicular accidents (bicycles and vehicles) ranging from minor accidents to fatal accidents. Many of these accidents are the result of the conditions of the city's roads, driving behaviours, the drivers themselves, or even the specific weather conditions. The problem then is how to reduce the number of vehicular accidents in Seattle using the best information available. For this, it is possible to predict the severity of an accident given certain factors such as weather and the road conditions. In this way, drivers can take preventive actions such as more careful driving behaviours or even change their routes, which would be directly reflected in a reduction in the accident rate in the city.

The solution to this problem would allow the local government of Seattle to develop informative campaigns to reduce vehicle accidents, reducing the social and economic costs of attending future accidents. Likewise, drivers and even pedestrians would also benefit, since they are the ones who are directly involved in the vehicle accidents.