

## Introduction

There is no doubt that the reduction of tragic road crashes is a wish of many people. According to statistics posted on the WHO website, traffic collisions kill 1.35 million humans worldwide each year, with losses equivalent to 3% of GDP in many countries (<https://www.who.int/health-topics/road-safety>, Accessed on 9/5/2020). With traffic accidents being the leading cause of death for children and young adults between the ages of 5 and 29, according to WHO statistics, there is an urgent need to address this issue.

The City of Seattle is also focusing on this issue, with the "Vision Zero" plan to reduce traffic fatalities to zero by 2030 being launched in 2015 (<http://www.seattle.gov/visionzero>, accessed on 9/5/2020). According to the Vision Zero 2019 UPDATE report issued by the City of Seattle, traffic fatalities have shown a brief plunge from over 40 recorded in 2006, but have remained generally between 15 and 25 for more than a decade since then until the end of 2019, with a marked downward trend in It is not indicative ([http://www.seattle.gov/Documents/Departments/SDOT/VisionZero/2019\\_VZ\\_Update\\_Report.pdf](http://www.seattle.gov/Documents/Departments/SDOT/VisionZero/2019_VZ_Update_Report.pdf), accessed on 9/5/2020). This study analyzes traffic accident data from the City of Seattle and explores possible interventions and potential countermeasures to realize the Vision Zero plan, based on an examination of the conditions under which serious traffic accidents, such as personal injury, are occurring.