**Business Problem**

The Seattle government is going to prevent avoidable car accidents by employing methods that alert drivers to remind them to be more careful in critical situations.

Besides the common reasons that cause accident, weather, visibility, or road conditions are the major uncontrollable factors that can be prevented by revealing hidden patterns in the data and announcing warning to the local government and drivers on the targeted roads.

The target audience of the project is local Seattle government, drivers, rescue groups. The model and its results are going to provide some advice for the target audience to make insightful decisions for reducing the number of accidents and injuries for the city.

**Data**

The data was collected by the Seattle Police Department and Accident Traffic Records Department from 2004 to present.

The data consists:

* 37 independent variables
* 194,673 rows.
* The dependent variable **SEVERITYCODE**, contains numbers that correspond to different levels of severity caused by an accident from 0 to 4.

Severity codes are as follows:

* 0 🡪 Unknown
* 1 🡪 Chance or Property Damage
* 2 🡪 Chance of Injury
* 2b 🡪 Chance of Serious Injury
* 3 🡪 Chance of Fatality