**Denver Traffic Accidents- Project Details**

**Project Overview**

* Motivation: The city of Denver’s population has grown significantly over the last 10 years, and although population growth has slowed recently, they are still increasing. This analysis attempts to understand how this phenomenon relates to the city traffic patterns, through the lens of car accidents.
* Objective: To determine the most dangerous and safest neighborhoods, by analyzing both frequency and severity; and attempt to identify the safest conditions for driving that will minimize the chances of an accident the most.
* Scope: The primary dataset contains all accidents occurring within the city of Denver since 2013.

**Research Hypothesis**

* If highways are compared to city streets, more accidents will occur near highways.
* If it is a weekday, more accidents will occur due to the high number of commuters on the road.
* If weather conditions involve precipitation such as snow or rain, then there will be a higher frequency of accidents.

**Data Overview**

* Denver Open Data Catalog
  + Run by the city and county of Denver, it is a public access website for various data sets involving transportation, public safety, education, etc.
  + Data is based on the National Incident Based Reporting System (NIBRS)
  + First published in 2020, currently updated weekly

**Data Limitations**

* Denver Open Data Catalog
  + Not limited by the age of data, since it is updated weekly
  + Data does present with many missing entries, highlighting the fact that data collection is an imperfect process and not all pertinent info gets gathered

**Descriptive Analysis**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **Mean** | **Median** | **Standard Deviation** |
| Fatalities | 0.00247 | 0 | 0.0521 |
| Seriously Injured | 0.0247 | 0 | 0.181 |

See scripts- Accident Analysis for more information.

**Data Source**: <https://www.denvergov.org/opendata/dataset/city-and-county-of-denver-traffic-accidents>