

## **Capstone Project – The Battle of Neighbourhoods (Part 1)**

### **Introduction/Business Problem:**

Because of an increasing demand in the automobile sector, we see a humongous number of automobiles swarming the roads all around the world. This has given a rise to the concern of increasing cases of accidents on road all over the world. We restrict our analysis to the accidents and collisions data of the New York City in USA.

The following project aims to interest the individuals from the Town and City planning backgrounds and help them to understand the layout of the medical facilities across the city and an approximation for the response time in case of an on road medical emergency.

This analysis encapsulates the visualizations relating to the hospitals in the New York City of United States of America along with the clustered visualizations of the key Accident-prone areas in the city of New York from 1 July 2020 up until 8 September 2020. The data set used for the analysis and visualization is the NYPD collisions data available on the below mentioned link updated daily.

<https://data.cityofnewyork.us/Public-Safety/Motor-Vehicle-Collisions-Crashes/h9gi-nx95/data>

The idea behind the visual analysis of this domain of data is to see a distribution of the accidents in New York City as individual accidents and as a zone of accidents forming a cluster to be termed as Accident-Prone zone. In addition, the simultaneous plot of the hospitals in the city also helps to visualize the clustering of accidents and the nearest hospital in order to cater to the needs of the accident victims and helping understand the response time and medical aid availability across the city.

This project gives an overview of the medical facilities spread across the city and how much is the feasibility of the same in case of an on road medical emergency requirement.