ANALYZING CRIMES IN US BALTIMORE CITY

1. INTRODUCTION/BUSINESS PROBLEM

1.1 BACKGROUND

Baltimore is the most populous city in the state of Maryland and the 30th most populous city in the United States, with a population of 593,490 in 2019. After a decline in major manufacturing, heavy industry, and restructuring of the rail industry, the city has shifted to a service-oriented economy.

Administratively, the city is officially divided into nine geographical regions: North, Northeast, East, Southeast, South, Southwest, West, Northwest, and Central, with each district patrolled by a respective Baltimore Police Department.

Baltimore is notorious for its significantly high crime rate, including a violent crime rate that ranks high above the national average. Violent crime spiked in 2015 after the death of Freddie Gray on April 19, 2015, which touched off riots and an increase in murders. The city recorded a total of 2027 violent crimes and 4928 property crimes in 2017.

Therefore, studying crime dynamics in Baltimore and deriving useful tips will go a long way in reducing crime infestation in the city and suggesting better ways of coping with it.

1.2 PROBLEM

The project will tackle the following tasks or problems:

- determine the safest and the most dangerous districts and neighborhoods in Baltimore,
- establish yearly crime trends from 2014 to 2020,
- determine crime incidents per each district
- identify the commonest crimes in Baltimore,
- locate safest venues in Baltimore

To achieve these tasks, the project will use crime data provided by Baltimore police department to categorize and group Baltimore districts into three blocks: high crime, moderate and low crime areas and locate them on Baltimore map in three colors, namely: red (crime infested),

green (safest) and yellow (average), and then derive safest neighborhoods and venues. In addition, the crime data will be used to determine cumulative crime trends for the last seven years, crime incidents per district and to list top ten crimes in Baltimore.