

Compare neighborhoods of city of Baltimore and predict probability of crime.

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## 1 Introduction

### 1.1 Background

Crime in the city of Baltimore is becoming a concern in the recent times. The crime rate is steadily increasing over years. All the neighborhoods in the city do not have the same level of crime. Crime rate varies across neighborhoods. Baltimore police department releases data on all crimes committed across all neighborhoods of Baltimore. The main reason of releasing this data to public, is to create awareness to people. Staying vigil would help people from staying off trouble.

### 1.2 Problem

Understanding the crime data of the city, available in the public domain, is very important. The data can be used to understand the neighborhoods which are affected the most, the rate at which crime is increasing, possible reasons for the crime in a particular neighborhood, advisory to local people and travelers to maintain high precaution at certain time & place and to predict the crime. The scope of this project is to understand the crimes at different neighborhoods in the city of Baltimore and to predict the probability of crime based on location and popular places around it.

### 1.3 Interest

The result of this project is to create general awareness to people and travelers. It is also to help police with the prediction of crime to plan strategies to control crimes. Additional to the crime data issued by the police department the location data of the neighborhoods from foursquare is used to understand the parts of city where crime is high. This project could be further extended by collecting the demographics data of the city to get a thorough insight on the reasons for the crime and to have more accurate predictions on the probability of crimes.