

# Baltimore Crime Map

## 1. Objective

The general goal is to try to code up a system that reads and processes crime record data in the Baltimore Police Department and visualizes crime location patterns depending on user specified conditions.

## 2. Loading the data and translating dates and times

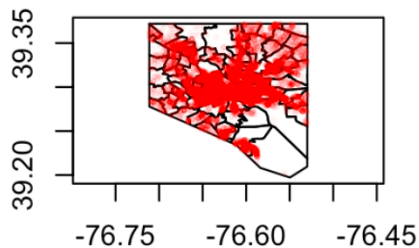
## 3. Transform coordinates data into numeric

In the original data, there is a column called "Location1". This variable indicates pairs of "(latitude, longitude)". Use string splitting techniques to obtain two numeric variables of longitude and latitude.

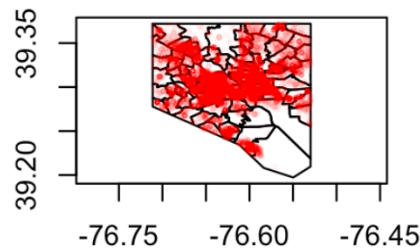
## 4. Summarize geographic and time patterns in assault-class of Crimes

Summarize the geographic and time patterns of crimes with the keyword "ASSAULT" in it. In terms of time patterns, split a day into 4 sections: morning (6:00 am to 12:00 pm), afternoon (12:00 pm to 6:00 pm), evening (6:00 pm to 12:00 am) and mid-night(12:00 am to 6:00 am), and separately plot the 4 geographic patterns.

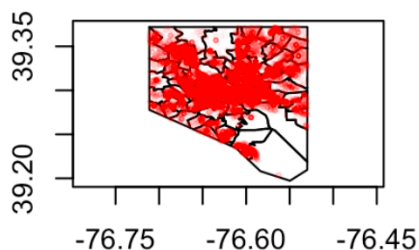
**hours:0-6**



**hours:6-12**



**hours:12-18**



**hours:18-24**

