# Crimes in Chicago

**Issue:**

Chicago Police Department has been tracking the crime rate and announced that their crime rate is higher than US average crime rate. The Police Department hence decided to divide the employees and assign specific responsibilities based on crime categories in order to control the crime incident rate. We are now looking into the insights of crime data to identify which crime types are increasing and the factors affecting this crime type so that Police could extend their employees work accordingly. This analysis includes the crime category type to be focused on and the districts of Chicago where the Police need to concentrate in order to the control crime rate. We determine which day in a week is affecting the crime rate.

# Description of primary type of Crimes:

Battery - 1) causes bodily harm to an individual or (2) makes physical contact of an insulting or provoking nature with an individual, Theft - The unlawful taking, carrying, leading, or riding away of property of another person, Narcotics – Drug Abuse, Criminal Damage - To willfully or maliciously destroy, damage, deface, or otherwise injure real or personal property, Assault - Any sexual act directed against another person, forcibly and/or against that person's will.

# Interpretations:

1. The number of crime cases decreased from 2012 to 2015 but noticeably, several cases were increased in 2016 unlike the pattern followed before. So, the police department planned to decrease in number of crime cases.
2. From the top 5 crime category graph, the highest crime cases registered in Chicago were related to Theft type with 329460 cases and next followed by Battery type with 263700 cases. Police department must act on controlling these major types of crime.
3. Considering the count of Arrest cases up on total crime cases registered, we can see that arrest rate for Theft category was reducing over the time period. Despite the increase in number of crime cases in Theft category from 2015 to 2016 the Arrest rate is still decreased. Similar pattern is observed for battery and criminal damage types. Since the police were not arresting the criminals on these type of crime cases, the number of cases might be rising. While Narcotic criminals were all arrested.
4. From the Top 5 Crime category cases per weekday graph, Thefts were more likely to happen on Fridays of the week. For Battery and criminal damage type high number of incidents are noted on weekends i.e., on Saturday and Sunday when compared to weekdays.
5. Accounting to top 5 police districts where the high number of crime incidents are registered, Police district plot states that the theft and battery crime cases were relatively more in South Chicago, Gresham, Englewood districts in order.

# Conclusion:

From the analysis, a greater number of crime incidents are noted in theft and battery types. Arrest rate for these two crime incidents types is decreasing across the years. When we look at Narcotics crime type, the arrest rate is high, and the number of incidents noted also decreased. Therefore, when arrest rate is increased by police department for theft and battery crime types the incidents rates can be controlled. Extending employees in South Chicago, Gresham and Englewood police districts where high number of crime incidents are recorded and working with extra alert on Friday to Sunday would help in controlling the crime incident rates.

My analysis shows that arrest rate would reduce the number of crime cases, alternatively someone might conclude, Criminals may not be arrested for all kinds of crimes, as there would be a specific criterion for proceeding to arrest based on the crime done. Someone else could conclude increasing awareness among the people about crime incident areas to be more cautious and careful.

