# Analysis of Crime in the city of Chicago

By

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1. Topic: Analysis of Crime in the city of Chicago.
2. Objective of the Study: To obtain insights about the crime in the city of Chicago, provide Descriptive, Predictive and Prescriptive analysis of the crimes in city of Chicago.
3. Data Source:

<https://data.cityofchicago.org/Public-Safety/Crimes-2001-to-present/ijzp-q8t2>

1. Project Description:

“City of Chicago Data Portal” of United States has provided the data source for the “crimes that took place in the city of Chicago” from ‘year 2001 to almost the present time’ which includes Type of the Crime, Description of the crime, Location of the crime, Description of location of the crime, Year of the crime took place etc. The data source has over 60,000 records.

The data source has multiple number of columns and rows, it is filled with interesting data which can be put to better use. The dataset contains column for unique identifier for the records, making it easier to identify each different record. One of the categories in the dataset is case number which is the unique to incidents provided by The Chicago Police Department RD Number.

The dataset also contains the specific information about the block, ward, district of the crime happened. With such a detailed information we would be able to pin point the appropriate location of the crime happened. It would be very helpful to deduce the data to such an extent to gather insights about which areas are prone to criminal attacks.

Furthermore, the data source provides us with the IUCR which is The Illinois Uniform Crime Reporting code. This is directly linked to the Primary Type and Description. Data source also contains Primary Type of the crime which means dataset provides us with crime type that happened over the years for instance we would be able to understand if the crime a theft, narcotics or motor vehicle theft etc.

Also the data source provides us with the Description of the crime happened which means if there was a theft happened in a particular area we would be able to understand aspects like how much money was stolen or if it was a theft from a building. If there was a narcotics crime, then what was the suspect in possession of or if it was a weapon violation then was the suspect carrying unlawful handgun etc.

In addendum, data source also provides us with the year as well as date and time of the crime happened making it easier for us to analyze the data and to find out the things like which year had the most crime rate? When does the more crime occurred, in weekdays or weekends? Which time of the day or night most crimes happened? Etc.

This chosen dataset contains detailed information about the crimes occurred in the City of Chicago and the dataset has been continuously updated. Essentially I am interested in doing Descriptive analysis, Predictive analysis and Prescriptive analysis on the acquired data. I would like to analyze which areas of the City of Chicago is more prone to the crime, which type of crime has been on the radar as well as what can be done to prevent these crimes.

1. Research Questions:
   1. Which type of crime have been most commonly occurred in different years?
   2. Which locations had been the target locations for the criminals and petty thieves?
   3. What was the time when most number of crimes happened?
   4. How many number of crimes happened each year?
   5. How many number of crimes were resulted in arrest of the criminals?