

### DATA SET DESCRIPTION

ItD', 'Case Number', 'Date', 'Block', 'IUCR', 'Primary Type', 'Description', 'Location Description', 'Arrest', 'Domestic', 'Beat', 'District', 'Ward', 'Community Area', 'FBI Code', 'X Coordinate', 'Y Coordinate', 'Year', 'Updated On', 'Latitude', 'Longitude', 'Location', 'Historical Wards 2003-2015', 'Zip Codes', 'Community Areas', 'Census Tracts', 'Wards', 'Boundaries - ZIP Codes', 'Police Districts', 'Police Beats'

### PLAN:

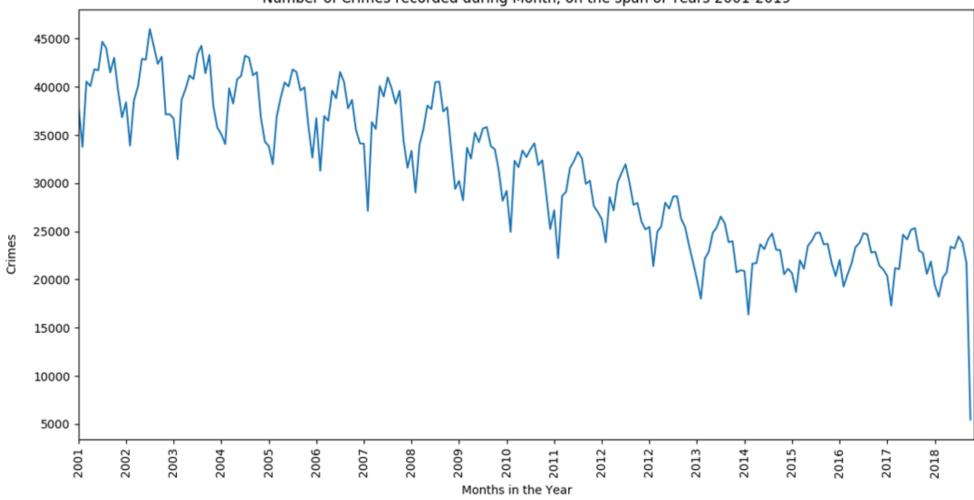
- Arrest, Domestic Crimes analysis
- Crime Loaction analysis
- 'Primary Type', 'Description', 'Location Description' text mining
- Location to the type of crime relation

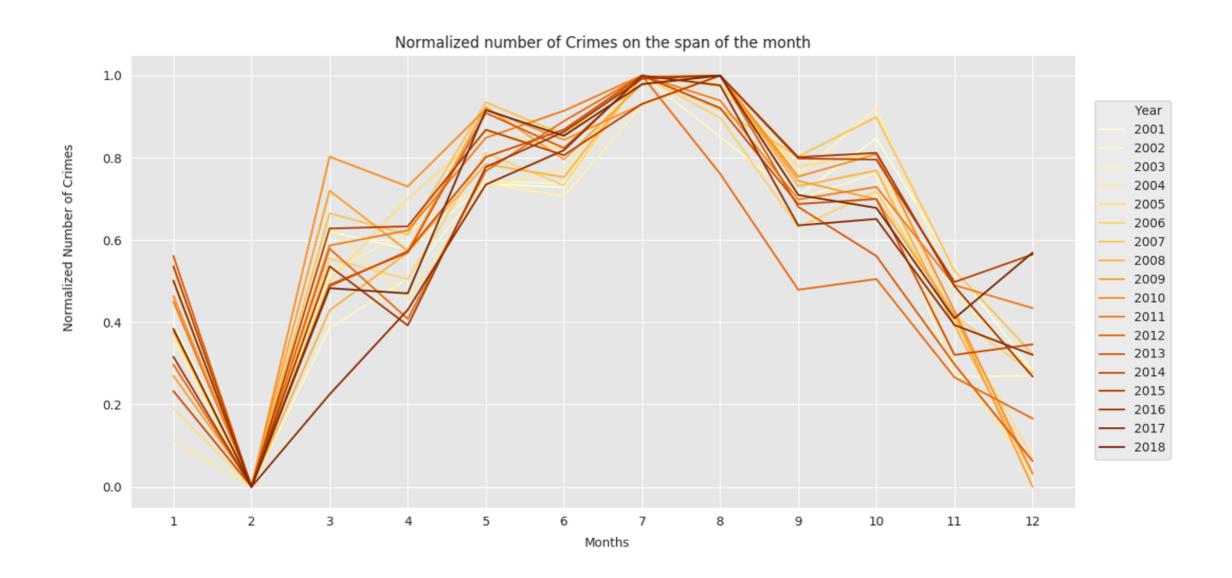
### BASIC

### DATASET DESCRIPTION

\*\*D', 'Case Number', 'Date', 'Block', 'IUCR', 'Primary Type', 'Description', 'Location Description', 'Arrest', 'Domestic', 'Beat', 'District', 'Ward', 'Community Area', 'FBI Code', 'X Coordinate', 'Y Coordinate', 'Year', 'Updated On', 'Latitude', 'Longitude', 'Location', 'Historical Wards 2003-2015', 'Zip Codes', 'Community Areas', 'Census Tracts', 'Wards', 'Boundaries - ZIP Codes', 'Police Districts', 'Police Beats'

Number of Crimes recorded during Month, on the span of Years 2001-2019





#### THEFT

**BATTERY** 

CRIMINAL DAMAGE

**NARCOTICS** 

OTHER OFFENSE

**ASSAULT** 

MOTOR VEHICLE THEFT

BURGLARY

**DECEPTIVE PRACTICE** 

**ROBBERY** 

**CRIMINAL TRESPASS** 

**PROSTITUTION** 

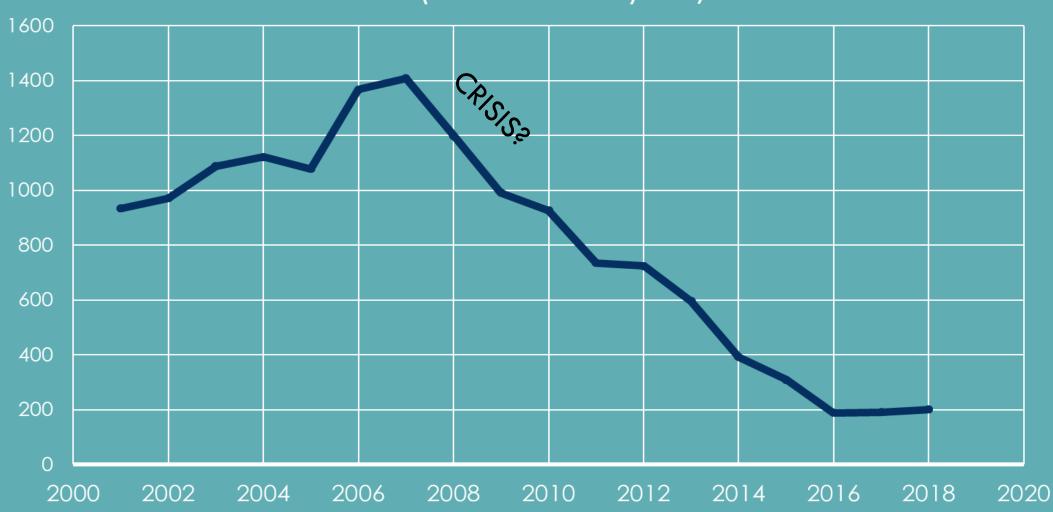
WEAPONS VIOLATION

**PUBLIC PEACE VIOLATION** 

OFFENSE INVOLVING CHILDREN

### PRIMARY TYPE ANALYSIS

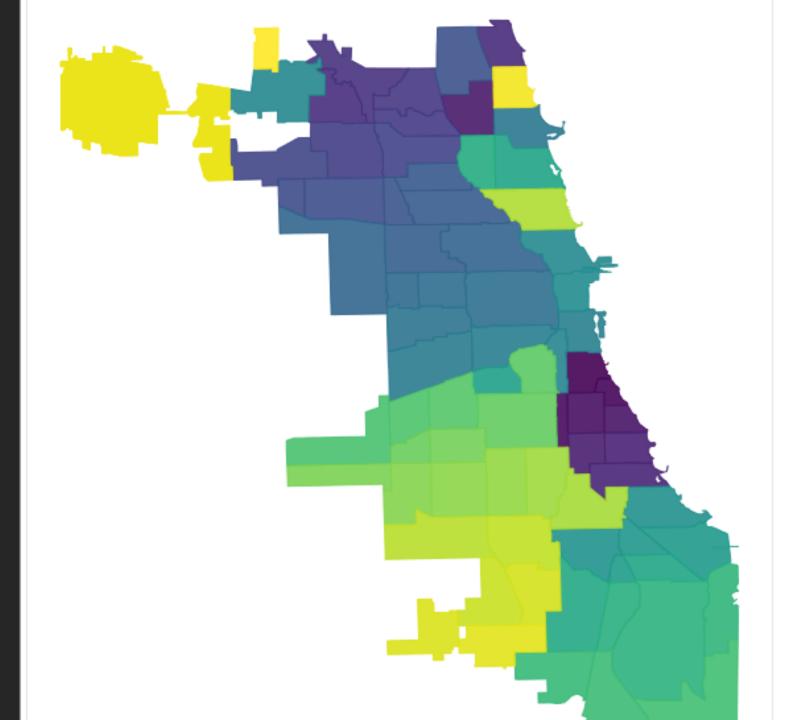
### Crimes amount (GAMBLING) in year function



### Crimes amount (STALKING)



CHICAGO MAPS



#### Park Ridge 39B 39B llage 78-79B-80-81A-Norridge Schiller Park Franklin Park Elmwood Park . Northlake Melrose Park Bellwood Maywood Berwyn Westchester Brookfield Lyons La Grange. 2828 Súmmit • Chicago Midway International Airport Bridgeview Burbank Hickory Hills Evergreen Park Oák Lawn Palos Hills

### HOMICIDE CRIMES 2018

Great for small amount of data

### Park Ridge 39B 39B 78-79B-80-81A-82C Norridge Schiller Park Franklin Park Elmwood Park Northlake Melrose Park -Oak-Park Bellwood Maywood Westchester Berwyn Cicero Brookfield Lyons La Grange Summit Airport Bridgeview Burbank Hickory Hills Evergreen Oák Lawn Palos Hills

## NARCOTIC RELATED CRIMES 2018 (HEATMAP)

Easier to accesscenter of the interest

Blue rings: police stations

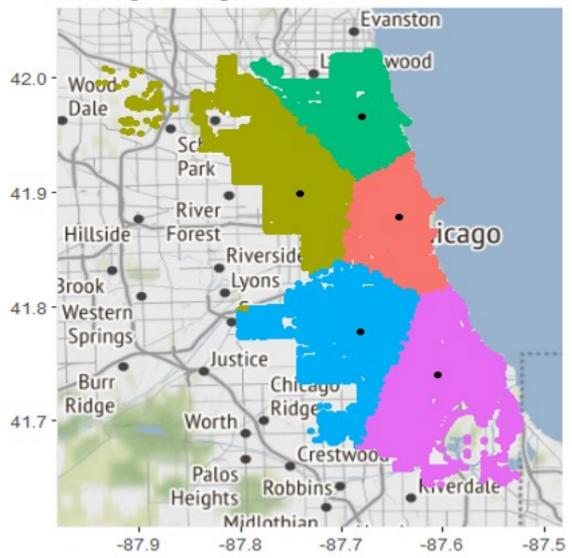


# RELOCATIONS OF POLICE STATIONS

5 MAIN POLICE
STATION BASED ON
ALL CRIMINAL
REPORTS

BLACK DOT INSIDE
AREAS: POLICE
STATION BY KMEANS

#### Chicago using KMean, k=5



Year	Primary Type	Crimes Amount	Arrest	Domestic	Ratio [%]
2019	THEFT	51894	5011	1946	9.66
2019	BATTERY	42053	8622	20172	20.50
2019	CRIMINAL DAMAGE	22723	1410	2701	6.21
2019	ASSAULT	17608	3156	4482	17.92
2019	DECEPTIVE PRACTICE	14516	655	116	4.51
2019	OTHER OFFENSE	14133	3125	4471	22.11
2019	NARCOTICS	11758	11750	5	99.93
2019	BURGLARY	7996	410	142	5.13
2019	MOTOR VEHICLE THEFT	7506	406	120	5.41
2019	ROBBERY	6603	530	146	8.03
2019	CRIMINAL TRESPASS	5782	321 <i>5</i>	292	55.60
2019	WEAPONS VIOLATION	5372	3598	13	66.98

- "WINDOWS" MAINPOLICE STATIONS
- BLUE DIAMONS –CURRENT POLICESTATIONS
- BLACK DOT –CENTROID BY KMEAN(QUICK RESPONSEPOLICE STATION)

