

Crime Prevention Centers

A Data Storytelling Project

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Topic & Motivation

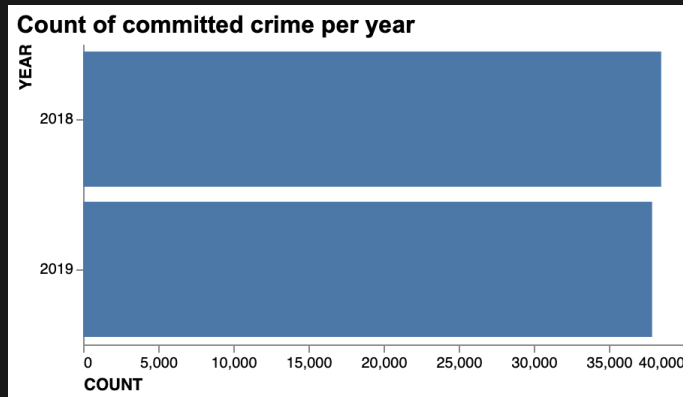
- Team tasked with fighting crime in Chicago City.
- Previous measures ineffective, new solution needed.
- Crime Prevention Centers as a contact point for all community members (all ages, ethnic and religious backgrounds).
- Centers offer workshops, training, self-help groups, and activities such as sports, music and art.
- Focus on prevention and understanding addiction instead of punishment.
- Giving people from difficult backgrounds a perspective.
- Goal: create a safer and more inclusive city for all residents.

Data

- Dataset reflects reported incidents of crime that occurred in the City of Chicago from 2001 to present.
- Data is extracted from the Chicago Police Department's.
- Focus on 2018 + 2019, otherwise there would be too much data.
- Prepared into 11 columns

	date	block	primary_type	arrest	district	year	latitude	longitude	month	hour	primary_group
0	2018-09-15 23:00:00	fairfield_ave	sexual_crime	False	9	2018	41.811058	-87.693066	9	23	group_2
1	2018-07-05 22:00:00	michigan_ave	theft	False	1	2018	41.852410	-87.623792	7	22	group_1
2	2019-08-24 01:00:00	kenneth_ave	theft	False	8	2019	41.739312	-87.732509	8	1	group_1
3	2018-01-19 11:44:00	latrobe_ave	narcotics	True	15	2018	41.880998	-87.756304	1	11	group_2
4	2018-06-18 23:00:00	barry_ave	criminal_damage	False	19	2018	41.938104	-87.653157	6	23	group_1

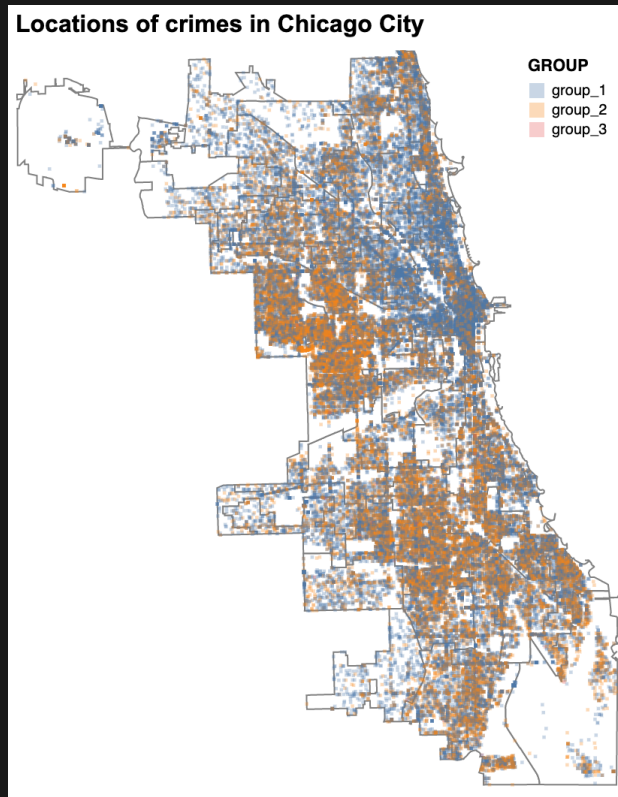
Exploratory Data Analysis



```
count      76362
unique       10
top        theft
freq       21637
Name: primary_type, dtype: object
```

- 76362 registered crimes in 2018 and 2019
- Registered 10 different types of crime
- 62 out of 159 homicides led to an arrest
- 4167 out of 4170 incidents with narcotics led to an arrest
- Theft and assault and battery account for over 50% of all registered crimes

Findings



- Several hotspots across the city
- Districts 11, 6, 8, 1 and 18 are the most criminal
- Inner districts: lighter crimes: “group 1”
- Outer districts: more serious crimes: “group 2”
- Most crimes happen during the day between 9 am and 7 pm

Conclusions + recommended action

- We are able to answer the questions:
- “Which kind of crimes happen particularly frequently and where/when do they happen?”
- “Where the new Crime Prevention Centers should be built in Chicago?”
- City council needs to react to prevent or lower crimes in Chicago
- We recommend to build at least 5 Crime Prevention Centers
- In the 5 most criminal districts (11, 6, 8, 1 and 18)
- Individual focus on crime prevention per district
- E.g.: Focus on narcotics in district 11 and focus on theft in district 1
- Opening hours from 9 am to 8 pm

