Analyzing Chicago Crime Data

By Alan Whitehead

CONCORDIA

INTERNATIONAL SCHOOL

HANOI

China
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Why did I choose to do Chicago Crime data?

BLAZE
FOOTBALL

Homicides In Chicago Eclipse U.S. Death Toll In Afghanistan And Iraq [Infographic]

Niall McCarthy Contributor ⓘ
Data journalist covering technological, societal and media topics

Forbes

CNN World » U.S. | Africa | Americas | Asia | Australia | China | Europe | Middle East | UK International Edition + 🔍 ☰

In Chicago, gun deaths take no holiday

By Ray Sanchez, CNN

The New York Times

Chicago's Murder Problem

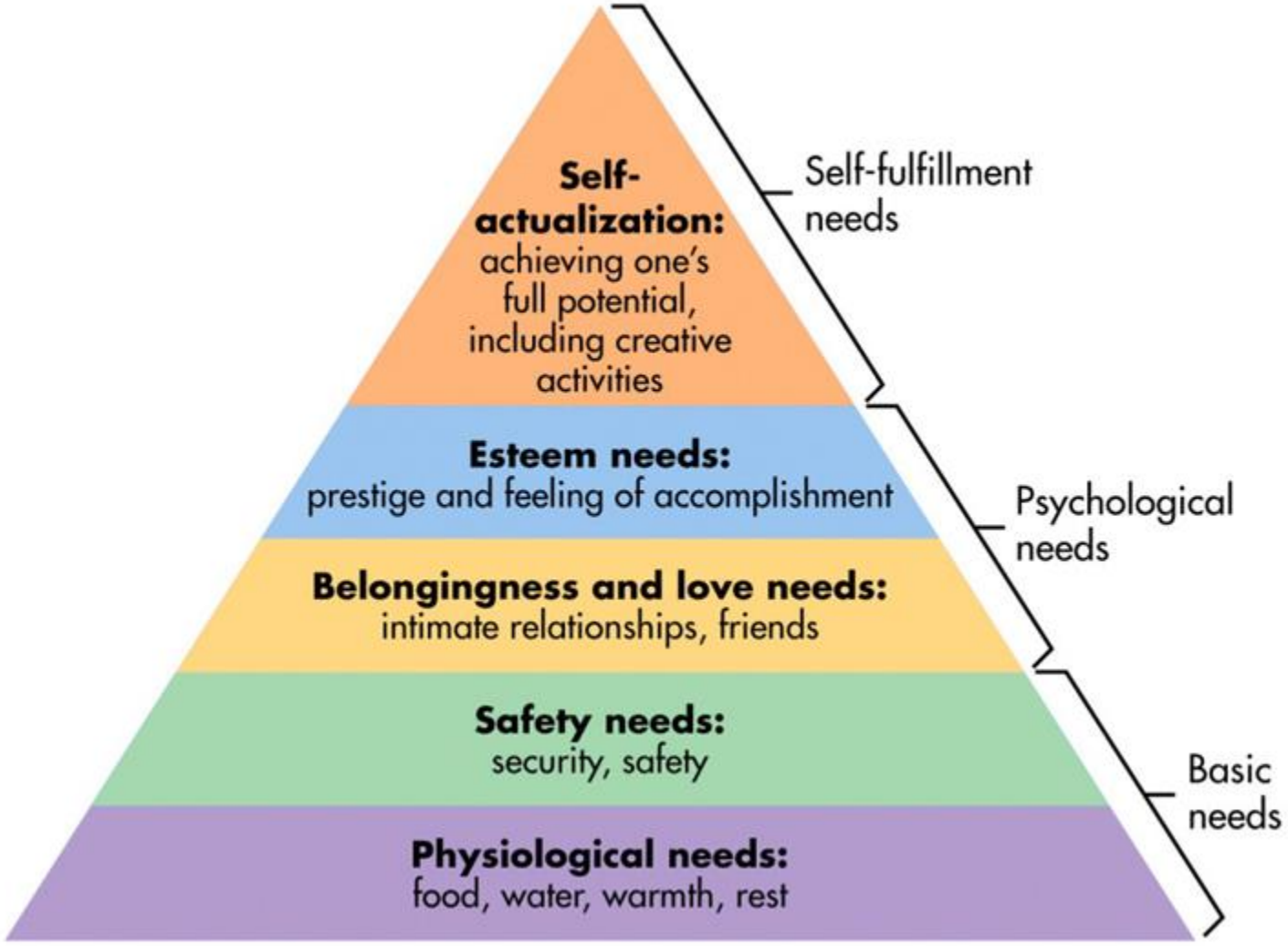
By **FORD FESSENDEN** and **HAEYOUN PARK** MAY 27, 2016

History of Crime in Chicago

Famous mobsters of Chicago

Al Capone

John Dillinger


Self-actualization: achieving one's full potential, including creative activities
Esteem needs: prestige and feeling of accomplishment
Belongingness and love needs: intimate relationships, friends
Safety needs: security, safety
Physiological needs: food, water, warmth, rest
Self-fulfillment needs
Psychological needs
Basic needs

Where did my data come from?

CHICAGO
DATA PORTAL

Date	Domestic	Location	Latitude	Longitude	Primary Type	Time	Description	Location Desc...	Community Ar...	District
2016-05-03	True	(41.864073157,...	-87.706818608	41.864073157	BATTERY	23:40:00	DOMESTIC B...	APARTMENT	29	10
2016-05-03	True	(41.782921527,...	-87.60436317)	41.782921527	BATTERY	21:40:00	DOMESTIC B...	RESIDENCE	42	3
2016-05-03	False	(41.89490828...	-87.758371958	41.894908283	PUBLIC PEA...	23:31:00	RECKLESS C...	STREET	25	15
2016-05-03	False	(41.88568684...	-87.749515983	41.885686845	BATTERY	22:10:00	SIMPLE	SIDEWALK	25	15
2016-05-03	True	(41.886297242...	-87.761750709	41.886297242	THEFT	22:00:00	$500 AND UN...	RESIDENCE	25	15
2016-05-03	False	(41.745354023...	-87.603798903	41.745354023	BATTERY	22:35:00	AGGRAVATE...	STREET	44	6
2016-05-03	False	(41.844023772...	-87.626923253	41.844023772	BATTERY	22:30:00	SIMPLE	CHA HALLWA...	35	1
2016-05-03	False	(41.811133958,...	-87.62074077)	41.811133958	BATTERY	21:30:00	SIMPLE	RESIDENCE ...	38	2
2016-05-03	False	(41.99813061, ...	-87.665814038)	41.99813061,	BATTERY	16:00:00	SIMPLE	SIDEWALK	1	24
2016-05-03	True	(41.768096835...	-87.663878589	41.768096835	BATTERY	22:30:00	DOMESTIC B...	STREET	67	7
2016-05-03	False	(41.761733286,...	-87.558309979	41.761733286	WEAPONS VI...	21:44:00	UNLAWFUL P...	VEHICLE NO...	43	3
2016-05-03	True	(41.893026751,...	-87.626750829	41.893026751	BATTERY	23:11:00	DOMESTIC B...	SIDEWALK	8	18
2016-05-03	False	(41.877811861, ...	-87.655758012	41.877811861	THEFT	17:30:00	FROM BUILDI...	OTHER	28	12
2016-05-03	False	(41.843016958...	-87.61722727)	41.843016958	THEFT	09:00:00	$500 AND UN...	STREET	35	1
2016-05-03	False	(41.910900826...	-87.686018747	41.910900826	THEFT	22:08:00	OVER $500	STREET	24	14
2016-05-03	True	(41.762089133...	-87.696632337	41.762089133	BATTERY	16:00:00	DOMESTIC B...	RESIDENCE	66	8
2016-05-03	False	(41.908237096...	-87.678437417	41.908237096	THEFT	21:45:00	OVER $500	STREET	24	14
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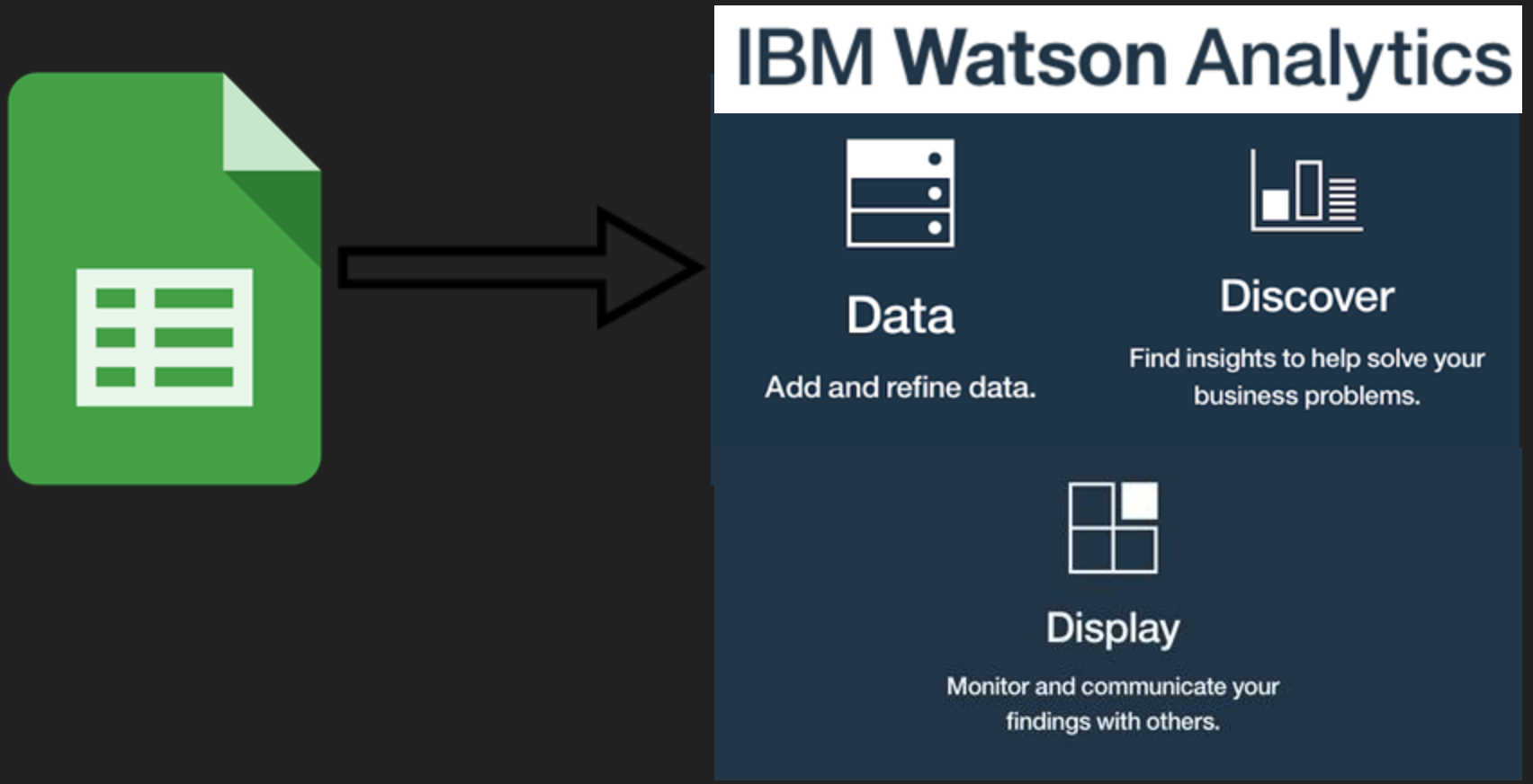
2016-05-03	False	(41.711843569,...	-87.646607932	41.711843569	MOTOR VEHI...	20:00:00	AUTOMOBILE	STREET	73	22
2016-05-03	True	(41.815875211, ...	-87.601832565	41.815875211	BATTERY	23:00:00	DOMESTIC B...	APARTMENT	39	2

Data Points

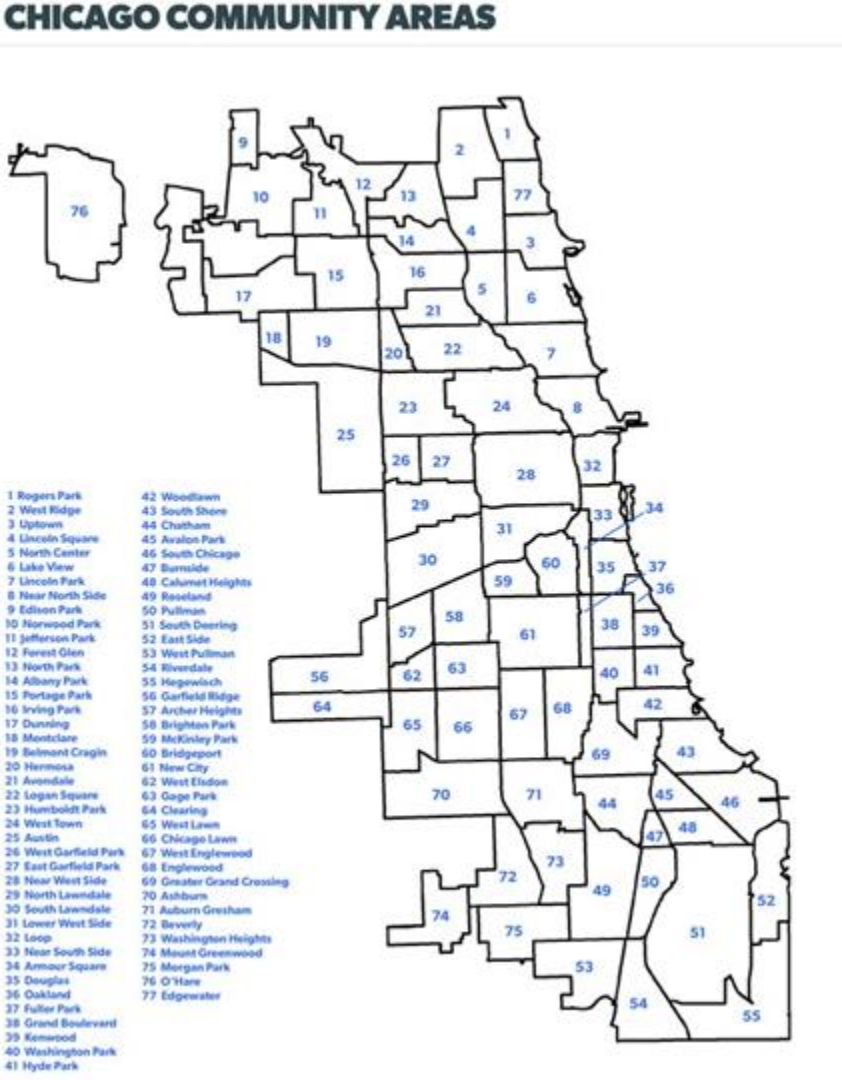
12 columns and approximately 33,000 rows

So how did I get my results?

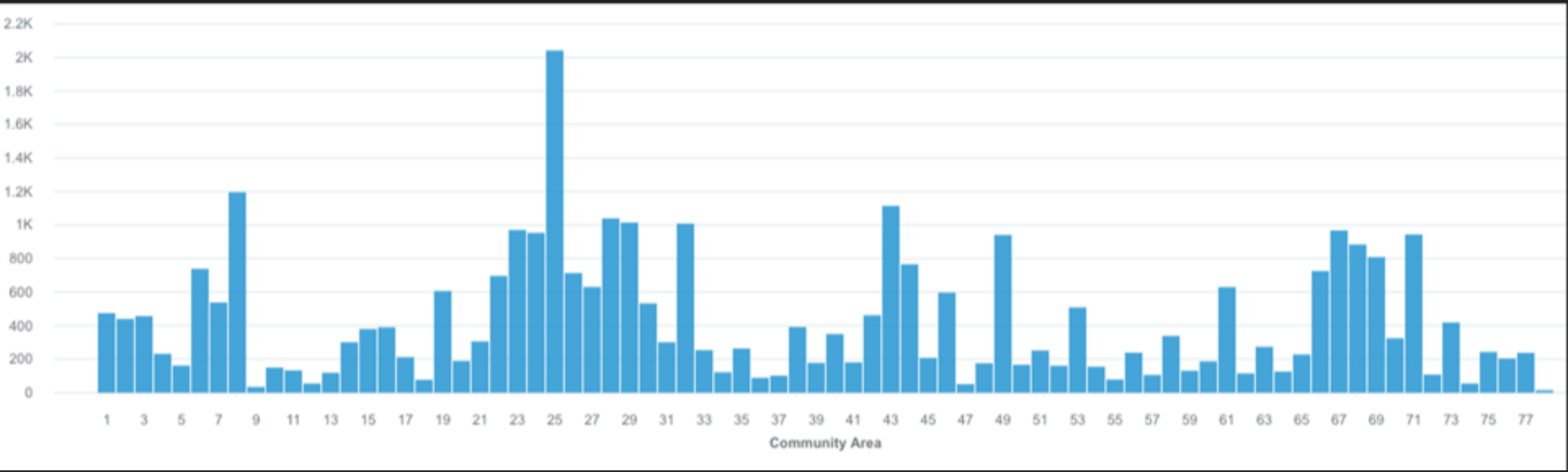


Community area map of Chicago

https://www.housingstudies.org/page/city-chicago-community-areas/

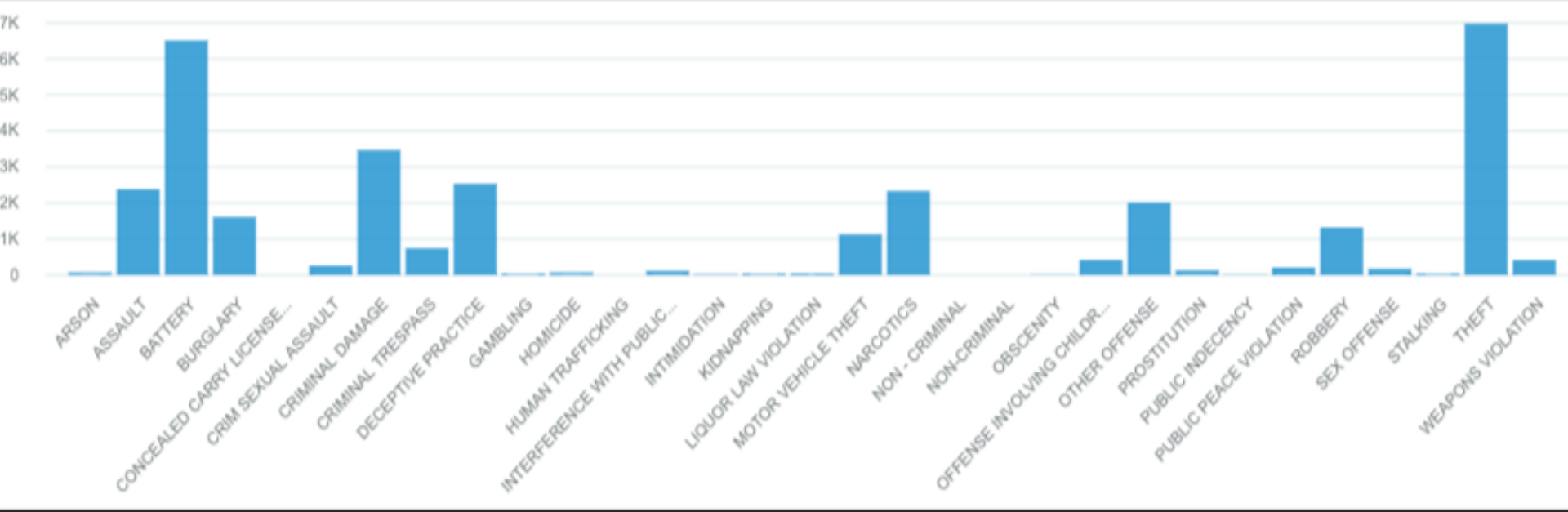


Crime of Chicago Graphed by Community areas

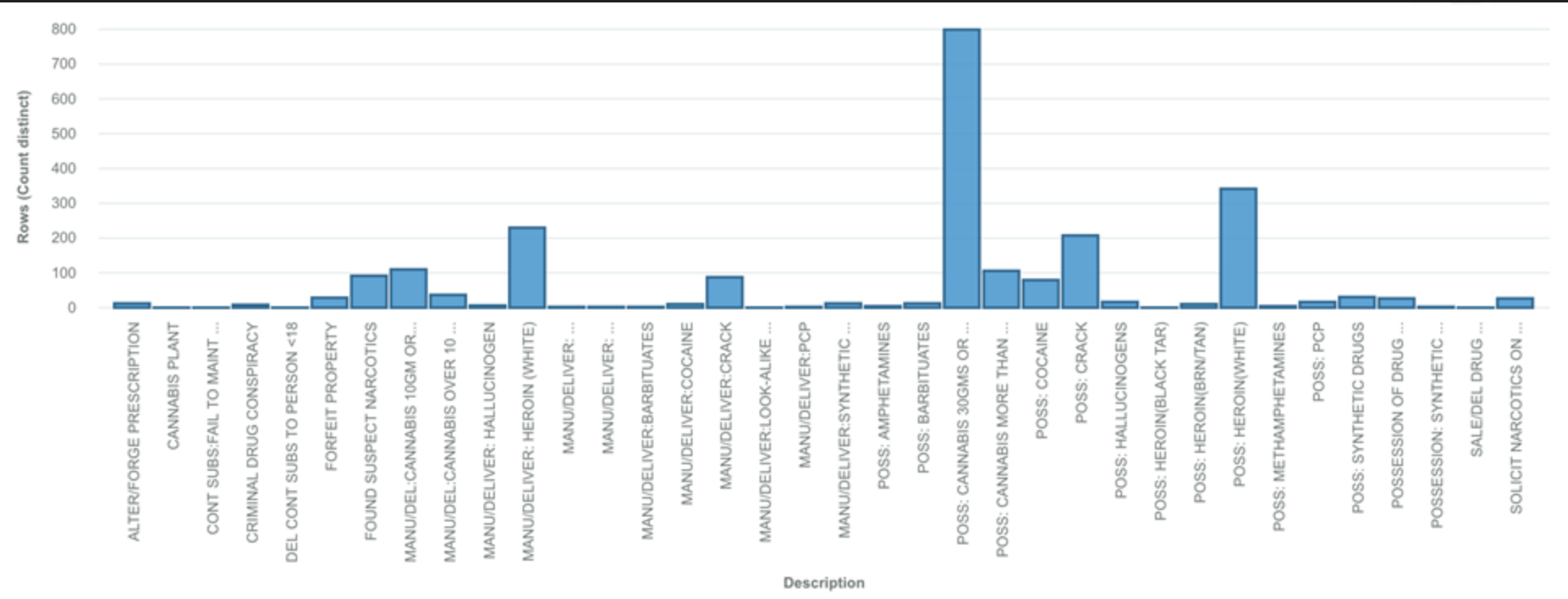


Where most crimes occur

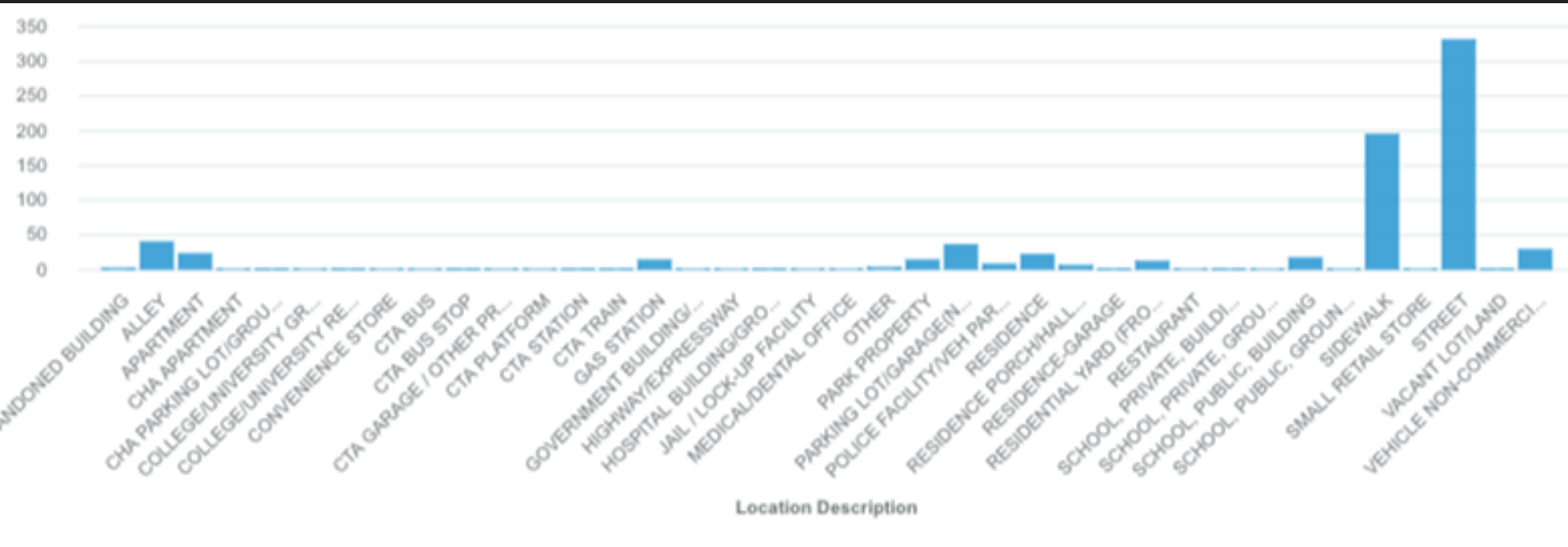
The most common types of crime occurring in Chicago



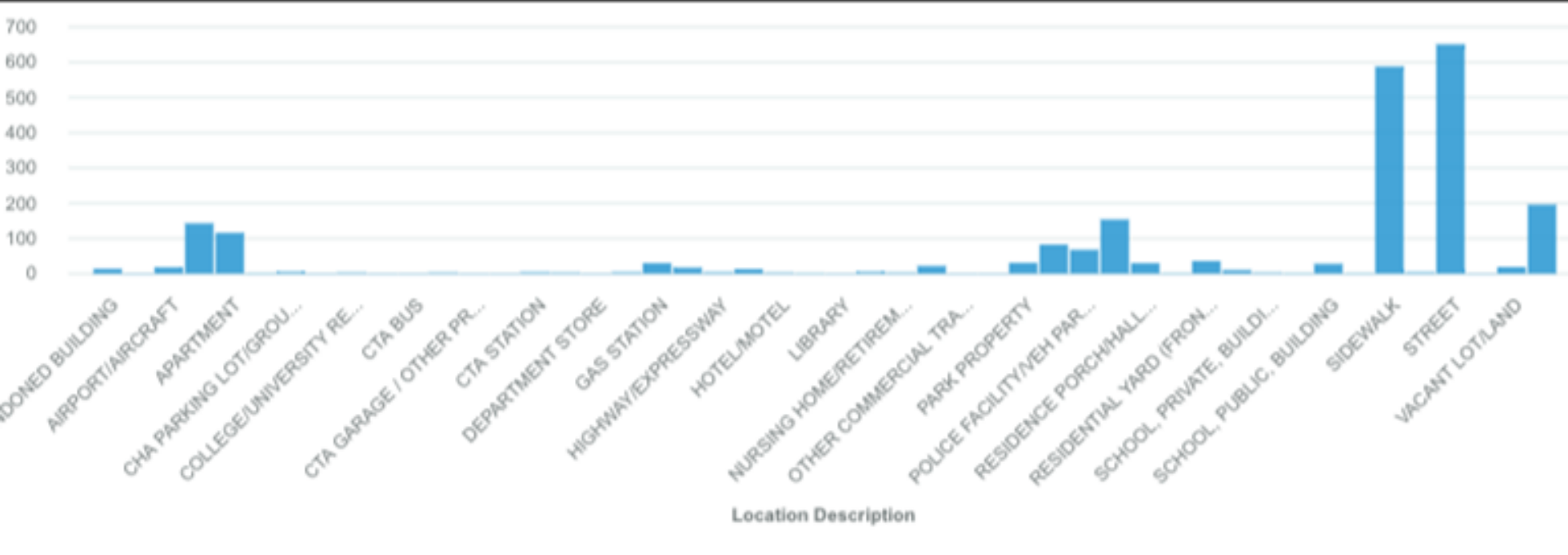
The common types of Narcotics sold in Chicago

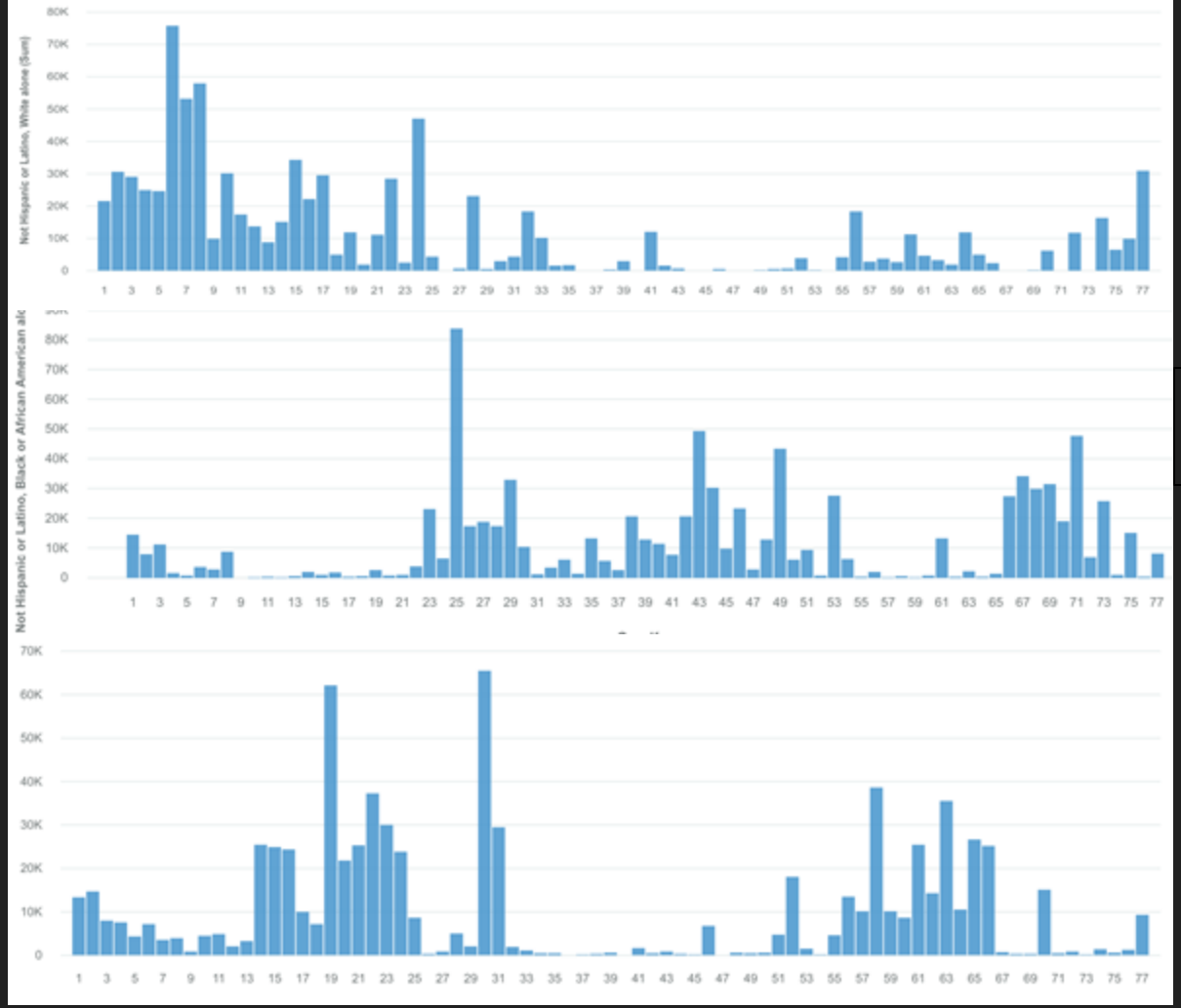


Where do most Cannabis Seizures occur



The most common locations for Drug busts to occur



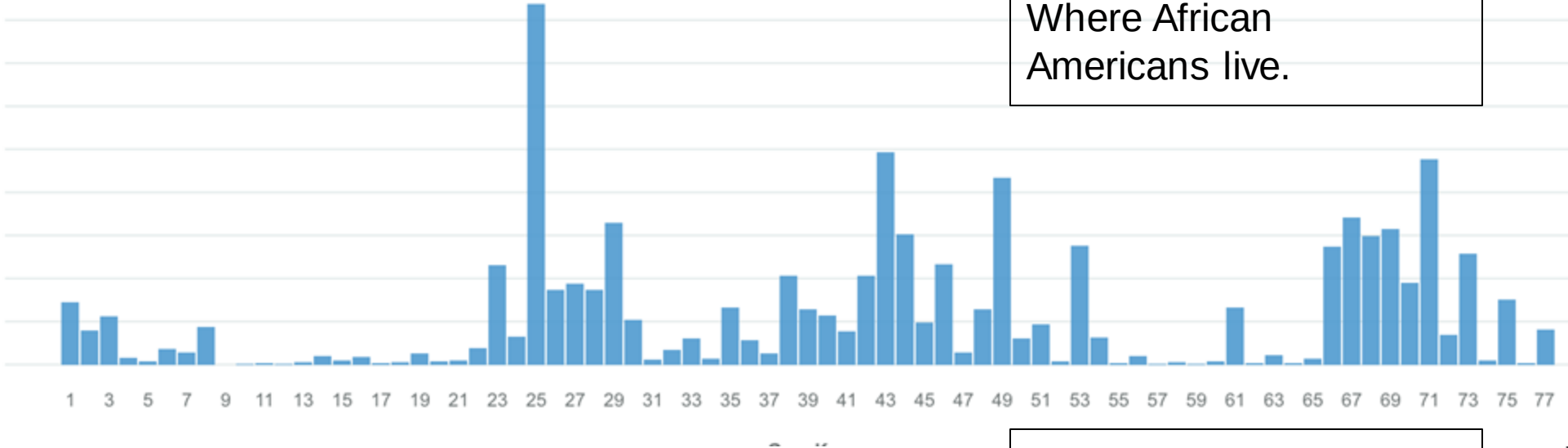


Where Caucasian's live.

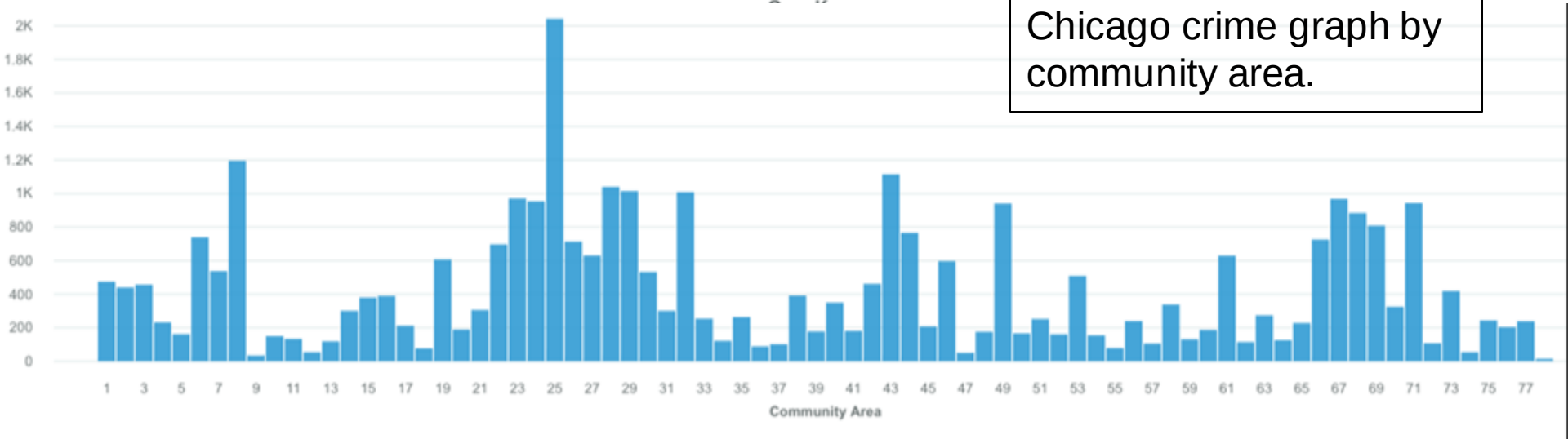
Where African Americans live.

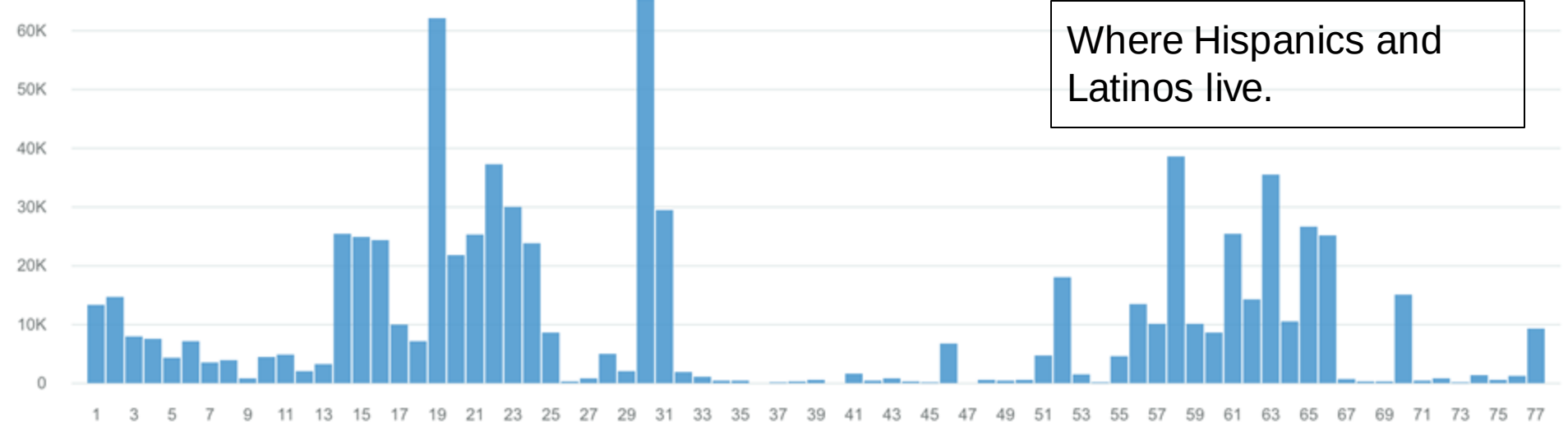
Where Hispanics and Latinos live

Where African Americans live.

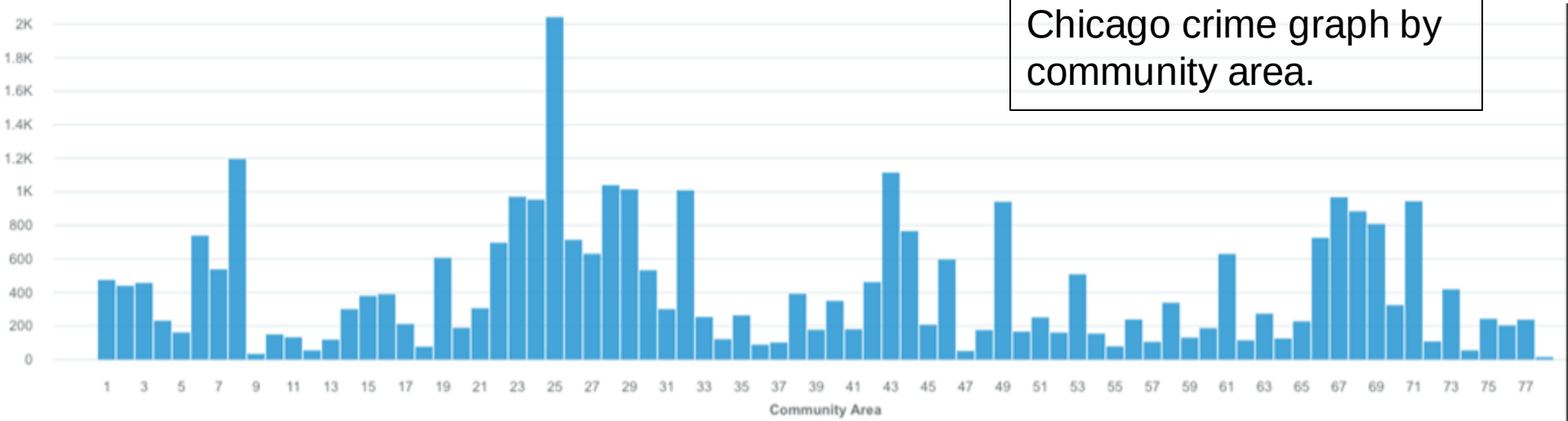


Chicago crime graph by community area.

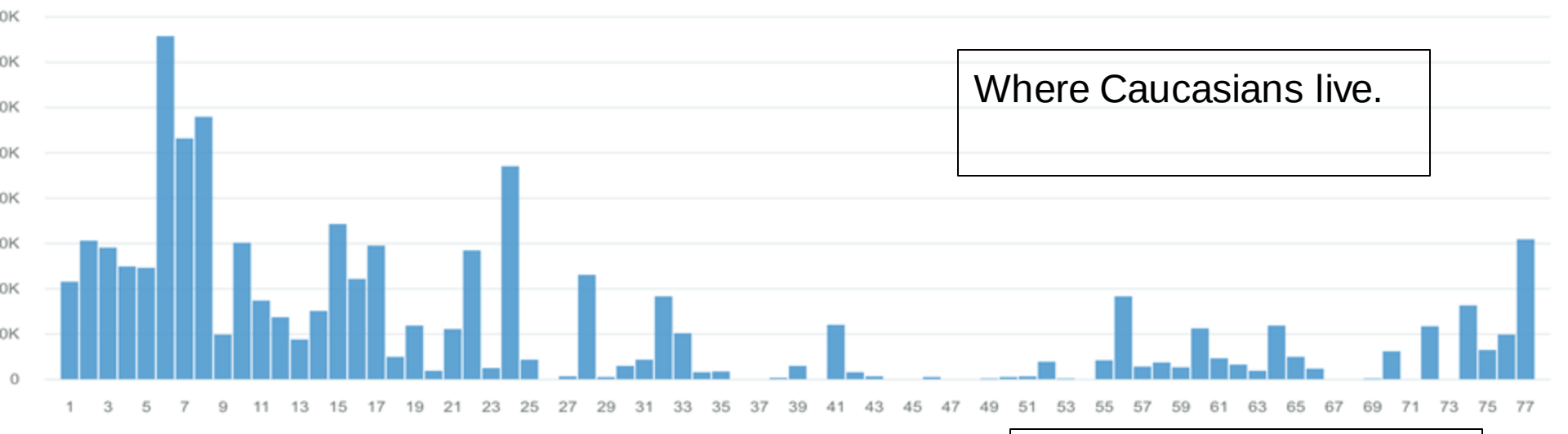


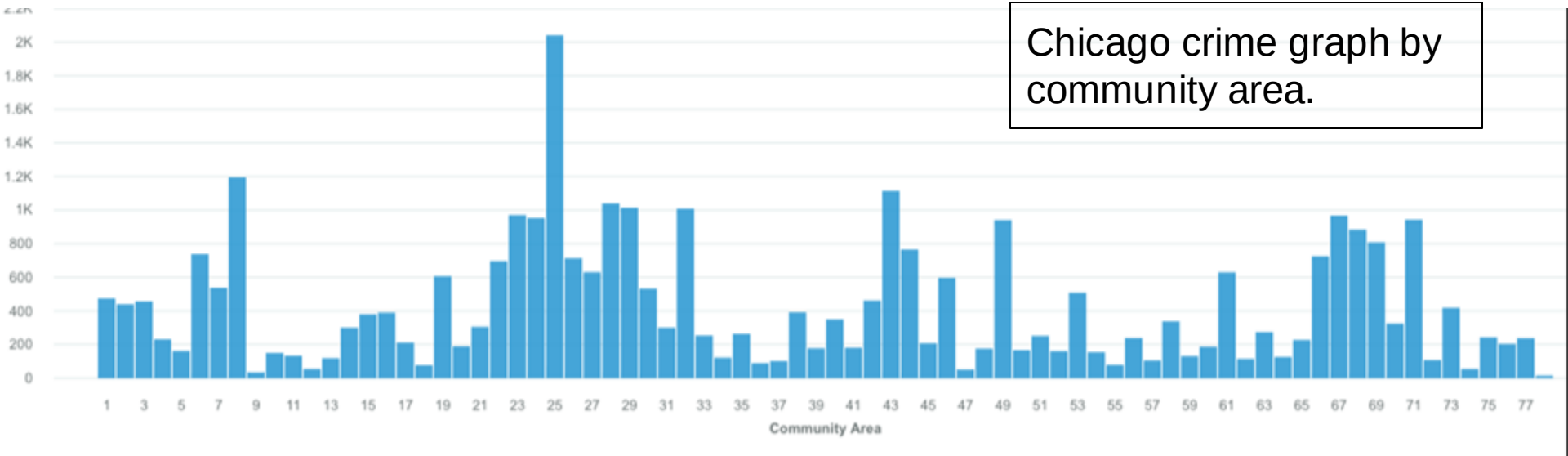


Where Hispanics and Latinos live.

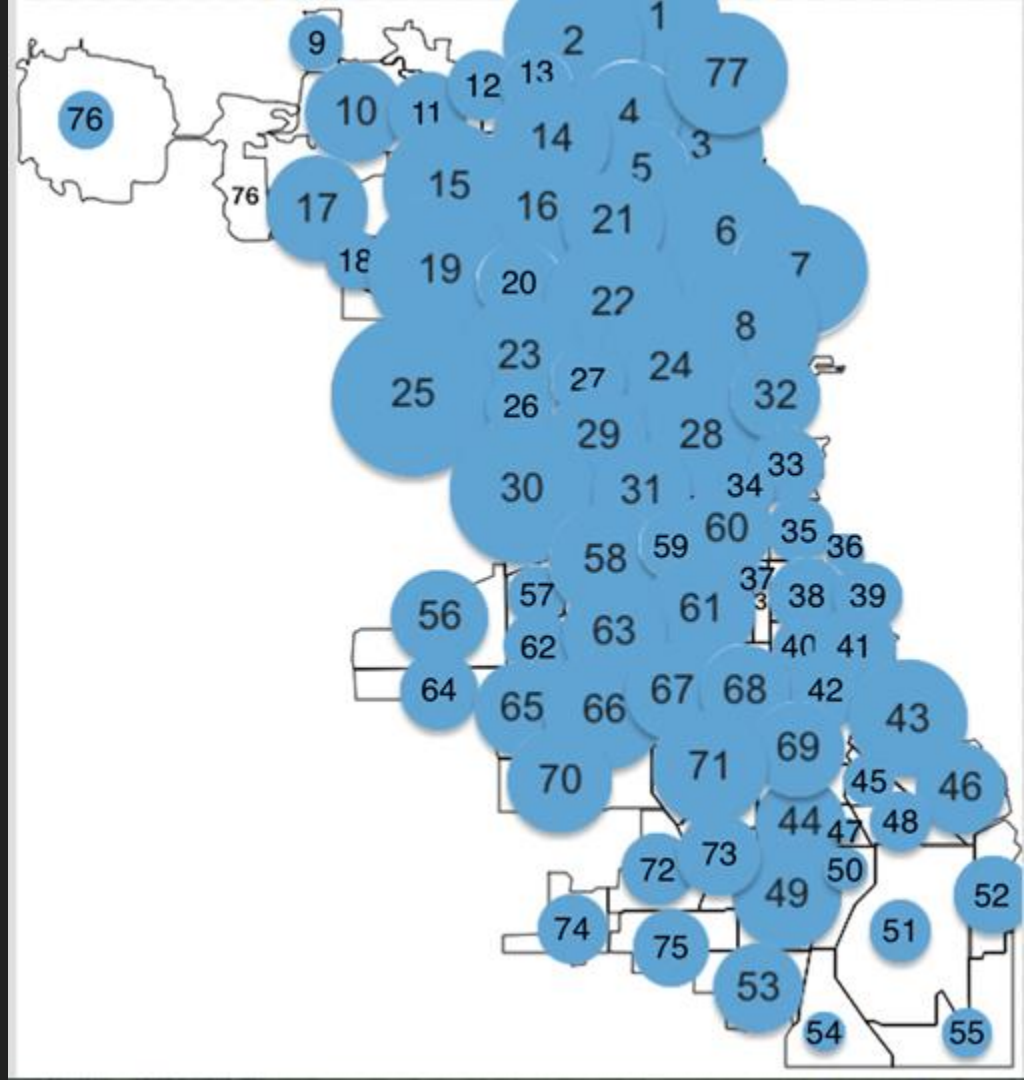


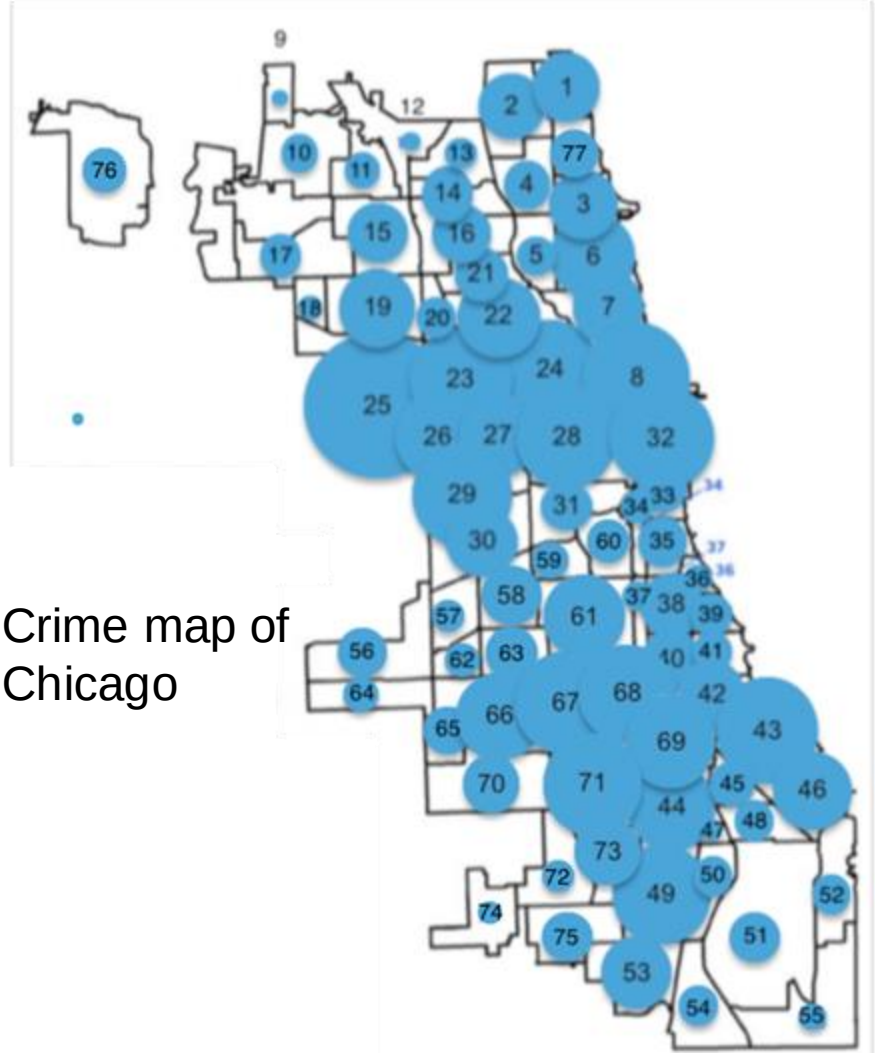
Chicago crime graph by community area.


Where Caucasians live.

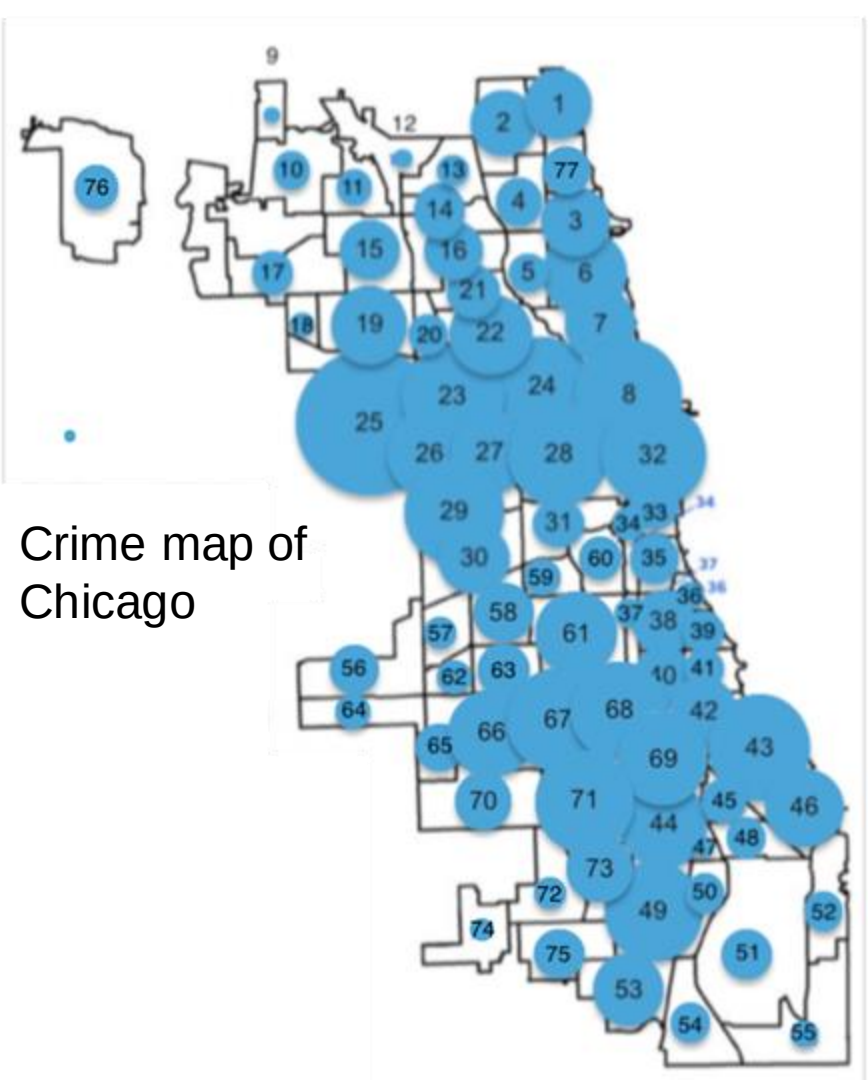

Chicago crime graph by community area.
Community Area

Total Population Map

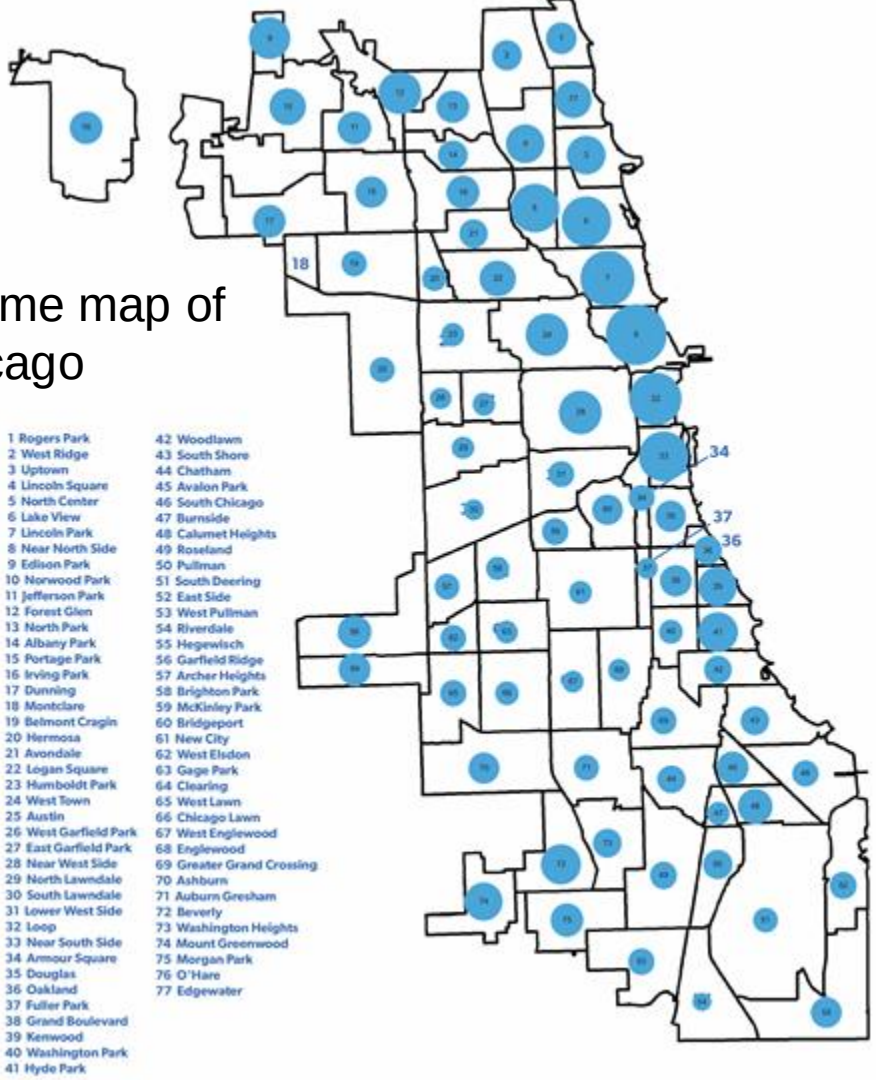




Crime map of Chicago



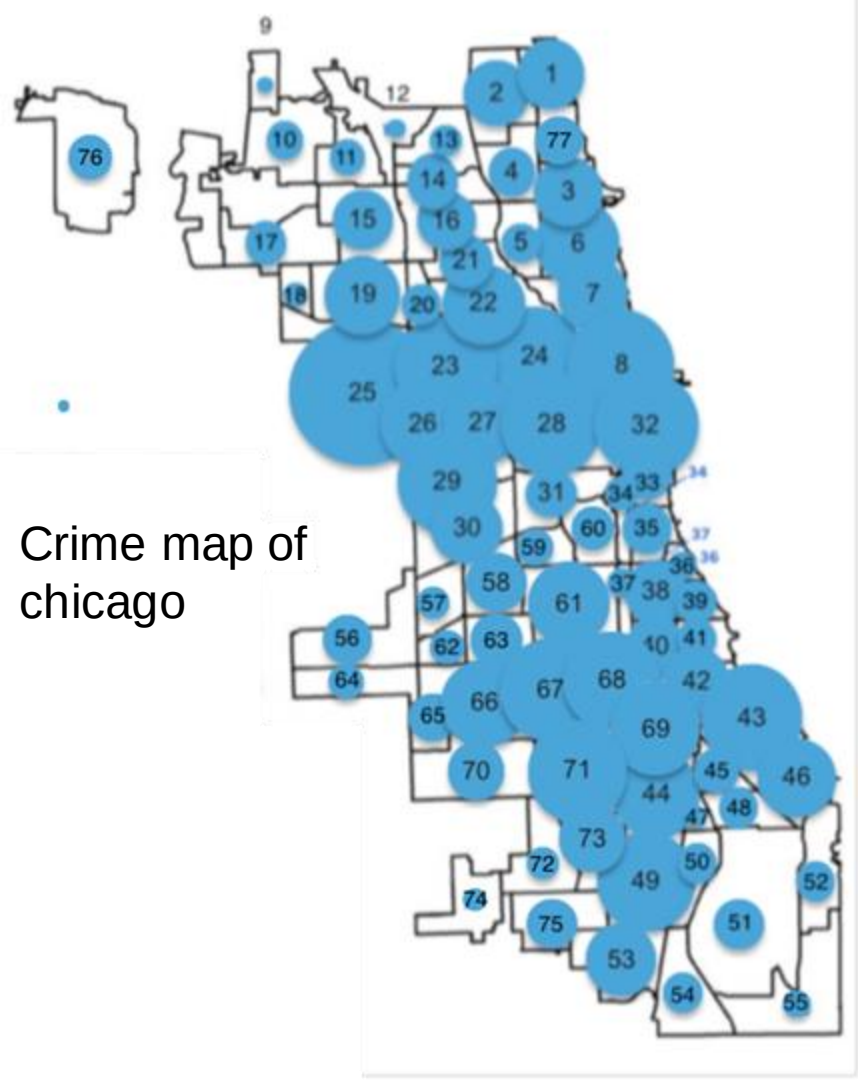
Crime map of Chicago



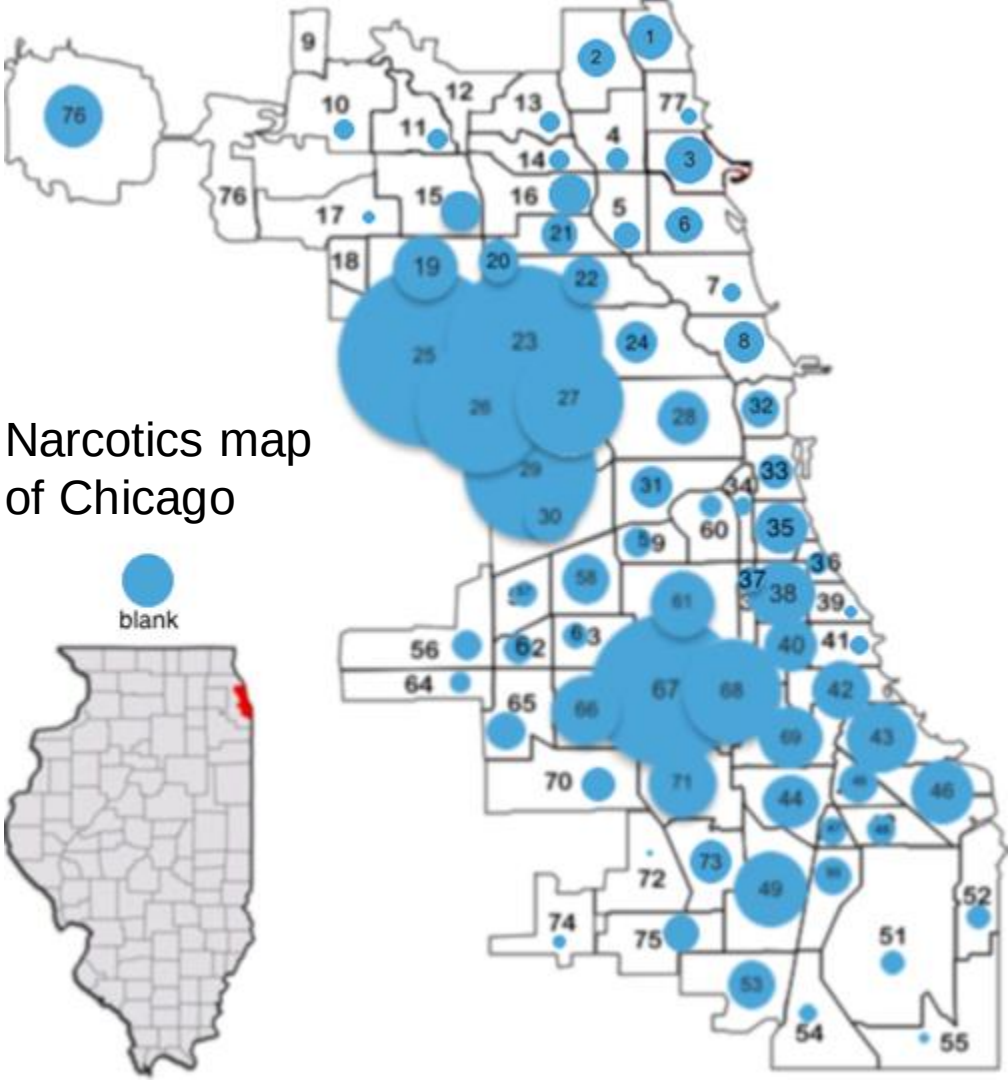
Income map of Chicago

1 Rogers Park
2 West Ridge
3 Uptown
4 Lincoln Square
5 North Center
6 Lake View
7 Lincoln Park
8 Near North Side
9 Edison Park
10 Norwood Park
11 Jefferson Park
12 Forest Glen
13 North Park
14 Albany Park
15 Portage Park
16 Irving Park
17 Dunning
18 Montclare
19 Belmont Cragin
20 Hermosa
21 Avondale
22 Logan Square
23 Humboldt Park
24 West Town
25 Austin
26 West Garfield Park
27 East Garfield Park
28 Near West Side
29 North Lawndale
30 South Lawndale
31 Lower West Side
32 Loop
33 Near South Side
34 Armour Square
35 Douglas
36 Oakland
37 Fuller Park
38 Grand Boulevard
39 Kenwood
40 Washington Park
41 Hyde Park
42 Woodlawn
43 South Shore
44 Chatham
45 Avalon Park
46 South Chicago
47 Burnside
48 Calumet Heights
49 Roseland
50 Pullman
51 South Deering
52 East Side
53 West Pullman
54 Riverdale
55 Hegewisch
56 Garfield Ridge
57 Archer Heights
58 Brighton Park
59 McKinley Park
60 Bridgeport
61 New City
62 West Elsdon
63 Gage Park
64 Clearing
65 West Lawn
66 Chicago Lawn
67 West Englewood
68 Englewood
69 Greater Grand Crossing
70 Ashburn
71 Auburn Gresham
72 Beverly
73 Washington Heights
74 Mount Greenwood
75 Morgan Park
76 O'Hare
77 Edgewater

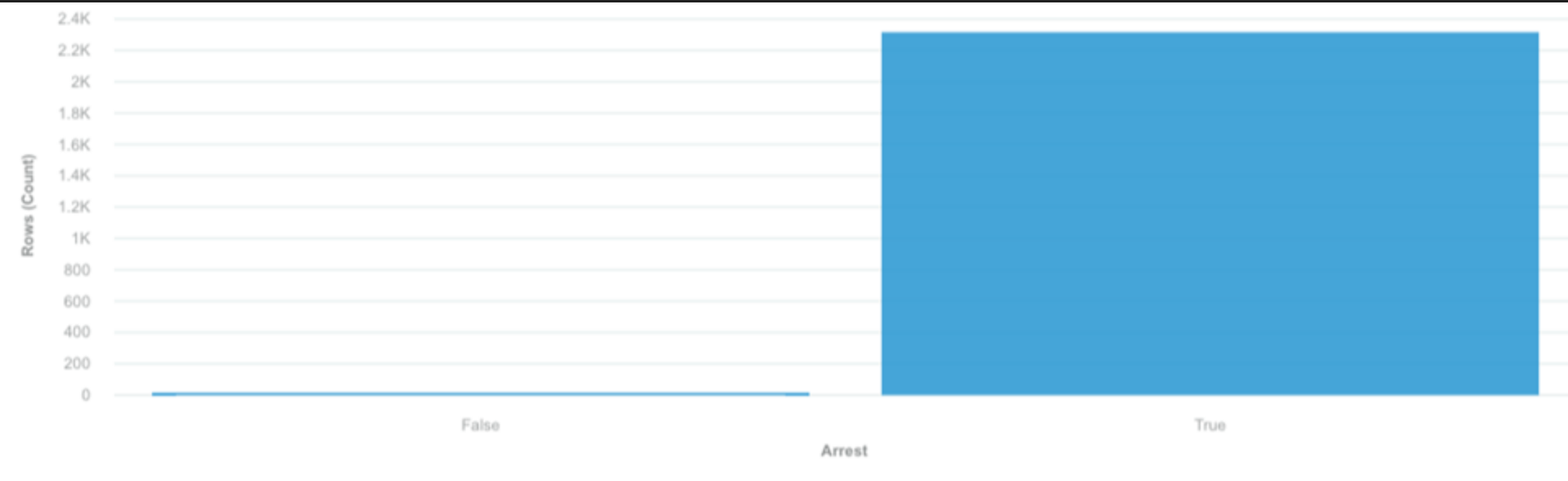
Crime map of chicago



Narcotics map of Chicago



What is the probability if you get arrested if caught with narcotics in chicago?



Conclusion

People of different ethnic background may face different challenges growing up in Chicago.

My Realization

I had a perception that Chicago was a safe city but I realized through this project that I was visiting the safer parts. By using big data I was able to enhance my perception of Chicago which was clearer than my personal experience.

How to stay safe

1. Behave like you belong there
2. Safety in numbers
3. Don’t display objects of wealth (watches, rings, etc)
4. Be confident
5. Tune in your 6th sense

https://www.travelinsurancereview.net/tips-and-advice/travel-safety-tips/how-not-to-get-robbed-in-a-foreign-country/

Next Steps

- Time of day
- Time of year
- Gender
- More demographics
- Weather
- Education background
- Repeat offenders

Difficulties

- Finding more datasets
- Location (GPS)
- Navigating around Watson (laggy and slow)
- Creating the Crime maps

Thank you for paying attention!

Bibliography

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