Srik Gorthy, Azizakhon Mirsaidova, Preetham Pareddy

Community Based Policing Our findings from SQL Analytics

Our theme is "Community based Policing". We are interested in exploring the differences in policing and the disparities in various aspects of police and policing between various districts on the following themes:

What is the demographic make-up between different areas and the policing differences in those communities?

During our analysis, we found that the large number of police officers in Chicago Police Departments is white. We investigated the demographic makeup of the police department in districts of Chicago to identify any patterns. Through that, we found out that districts with majority hispanic and black communities often have over half of the respective police officers who are of non-hispanic white race. As an example, the 10th district, Ogden Police Department, is dominated by Hispanic(56%) and White(35%) police officers when the population of the area is 96% Black and Hispanic. Table 1 and 2 explores the trends. Similarly, the 4th district, South Chicago police department, mainly consists of White(51%) police officers in contrast to the area's population which is 91% Black and Hispanic. (Shown in Table 3 and 4).

District_Number_Name	Race	No_of_Officers	Percentage
10TH DISTRICT - OGDEN	Asian/Pacific	9	2.52
10TH DISTRICT - OGDEN	Black	23	6.44
10TH DISTRICT - OGDEN	Hispanic	200	56.02
10TH DISTRICT - OGDEN	White	125	35.01
	Total	357	

Table 1: Racial account of police officers in Ogden

District_Number	District_Name	Race	Population	Percentage
10th	Ogden	Asian	239	0.20%
10th	Ogden	Black	39440	33.40%
10th	Ogden	Hispanic	73441	62.19%
10th	Ogden	Native American	144	0.12%
10th	Ogden	Other	529	0.45%
10th	Ogden	White	4300	3.64%
		Total	118093	

Table 2: Racial composition of Ogden

District_Number_Name Race No_of_Officers Percentage

4TH DISTRICT - SOUTH CHICAGO	Asian/Pacific	5	1.44
4TH DISTRICT - SOUTH CHICAGO	Black	83	23.85
4TH DISTRICT - SOUTH CHICAGO	Hispanic	83	23.85
4TH DISTRICT - SOUTH CHICAGO	White	177	50.86
	Total	348	

Table 3: Racial account of the police officers in South Chicago

District_Number	District_Name	Race	Population	Percentage
4th	South Chicago	Asian	258	0.21%
4th	South Chicago	Black	76399	61.82%
4th	South Chicago	Hispanic	35381	28.63%
4th	South Chicago	Native American	223	0.18%
4th	South Chicago	Other	1389	1.12%
4th	South Chicago	White	9925	8.03%
		Total	123575	

Table 4: Racial composition of South Chicago

What are the extrinsic profile/characteristics of officers who are rewarded/promoted in police departments from different communities?

By investigating the racial composition of the districts, we can identify the overall profile of the awarded police officers. These two districts, Ogden and South Chicago, have one of the highest awards conferred. This analysis gives us the hint to explore the differences between major awards count and officer count in the departments.

District	major_awards_count	officer_count
4TH DISTRICT - SOUTH CHICAGO	548	793
10TH DISTRICT - OGDEN	561	666

Table 5: Number of awards and awarded police officers in South Chicago and Ogden

Depending on the profile/characteristics from the previous point, does the misconduct allegations change in different police departments?

Building on our exploration from the previous question, we found that as the number of awards in the districts rises so does the number of total allegations.

What is the ratio of internal and external complaints on police officers based on the various communities?

The ratio of the internal and external complaints on police officers are analyzed in Table 6. The highest ratio can be found in South Chicago for a difference of 17.3 percent and Jefferson Park for 16.8 percent.

	Internal Complaints	External Complaints	
Police District	Count	count	Ratio
10TH DISTRICT - OGDEN	275	4572	16.63
11TH DISTRICT - HARRISON	346	4450	12.86
12TH DISTRICT - NEAR WEST	336	4772	14.20
14TH DISTRICT - SHAKESPEARE	268	4070	15.19
15TH DISTRICT - AUSTIN	297	3640	12.26
16TH DISTRICT - JEFFERSON PARK	353	5934	16.81
17TH DISTRICT - ALBANY PARK	264	4010	15.19
18TH DISTRICT - NEAR NORTH	427	7025	16.45
19TH DISTRICT - TOWN HALL	408	5815	14.25
1ST DISTRICT - CENTRAL	430	6512	15.14
20TH DISTRICT - LINCOLN	308	4275	13.88
22ND DISTRICT - MORGAN PARK	406	6690	16.48
24TH DISTRICT - ROGERS PARK	211	3298	15.63
25TH DISTRICT - GRAND CENTRAL	283	4551	16.08
2ND DISTRICT - WENTWORTH	688	6316	9.18
3RD DISTRICT - GRAND CROSSING	458	5641	12.32
4TH DISTRICT - SOUTH CHICAGO	391	6758	17.28
5TH DISTRICT - CALUMET	492	5679	11.54
6TH DISTRICT - GRESHAM	480	6780	14.13
7TH DISTRICT - ENGLEWOOD	411	5835	14.20
8TH DISTRICT - CHICAGO LAWN	452	7908	17.50
9TH DISTRICT - DEERING	309	5382	17.42
Total	8293	119913	14.46

Table 6: The ratio of the internal and external complaints on police officers