

## Checkpoint 1: Quantitative analysis

The theme of our project is to try to understand why some complaints are sustained while others aren't. The aim is to study the data and analyze how the police are held accountable for their actions and if yes, how?

This project aims to research whether the police have been punished for their misconduct over the years, whether the recommended punishment suggested by the disciplinary committees matched the actual punishment given to them (sustainment of the complaint), and what effect did the punishments (if any), have on their behaviour/career ahead.

Our group analyzed the following 5 questions. Each question may have subsections. We have listed the corresponding SQL script found in src/ as well as a brief analysis of the result.

### 1. What percent of disciplinary actions are sustained over a period of time?

We ask this question to understand what percent of the total number of recommended outcomes for all police complaints match the final outcome of the manner in which they are reprimanded. This is what is defined as the complaints being 'sustained', and is referred to as 'SU' in the data\_officer allegation table. We find that to date, this number stands at 8.8%. If we look at complaints that are 'not sustained' (recommended outcome does not match final outcome), which is represented by 'UN' in the table, the number stands at 21%.

final_finding	cnt	percent
	7610	3.0465835028103832
DS	12	0.00480407385462872516
EX	17322	6.9346806091565648
NA	35528	14.2232613256041123
NC	47	0.01881595593062917354
NS	114166	45.7051579739619197
SU	21990	8.8034653386071389
UN	53094	21.2556247698047945
ZZ	19	0.00760645026982881483

## 2. What is the difference between sustained and unsustained complaints from civilian and police officers?

We ask this question to understand the difference between the number of complaints sustained and unsustained when filed by the police officers and the civilians. We find that, if the complaints were filed by the police officers, the majority of them were sustained whereas if the complaints were filed by the civilians the majority of complaints were unsustained.

is_officer_complaint	count
FALSE	202608
TRUE	13444

## 3. What is the background (age, race, location, rank) of police officers for which complaints were sustained against?

We ask this question to find the pattern in the data for complaints sustained on the bases of officers background. By executing the query for the following question we infer that more than the majority number of complaints against white police officers were unsustained.

### FOR AGE

age	final_finding	total	age	final_finding	total
	SU	6	43	SU	63
23	SU	3	44	SU	69
24	SU	14	45	SU	55
25	SU	16	46	SU	54
26	SU	32	47	SU	56
27	SU	47	48	SU	80
28	SU	44	49	SU	75
29	SU	39	50	SU	94
30	SU	44	51	SU	103
31	SU	61	52	SU	103
32	SU	52	53	SU	92
33	SU	41	54	SU	91
34	SU	58	55	SU	84
35	SU	49	56	SU	83
36	SU	39	57	SU	104
37	SU	52	58	SU	81
38	SU	58	59	SU	73
39	SU	63	60	SU	67
40	SU	61	61	SU	74
41	SU	67	62	SU	52
42	SU	83	63	SU	64

age	final_finding	total	age	final_finding	total
64	SU	64	85	SU	41
65	SU	52	86	SU	42
66	SU	49	87	SU	34
67	SU	76	88	SU	40
68	SU	82	89	SU	44
69	SU	72	90	SU	49
70	SU	92	91	SU	37
71	SU	112	92	SU	42
72	SU	102	93	SU	41
73	SU	130	94	SU	41
74	SU	134	95	SU	38
75	SU	122	96	SU	44
76	SU	76	97	SU	35
77	SU	80	98	SU	31
78	SU	88	99	SU	29
79	SU	73	100	SU	32
80	SU	67	101	SU	22
81	SU	53	102	SU	12
82	SU	46	103	SU	8
83	SU	54	104	SU	6
84	SU	45	105	SU	1

#### FOR RACE

race	final_finding	total
Asian/Pacific	SU	76
Black	SU	1035
Hispanic	SU	755
Native American/Alaskan Native	SU	10
Unknown	SU	30
White	SU	2978

#### FOR RANK

rank	final_finding	total
	SU	153
Administrative Assistant I	SU	2
Assistant Deputy Superintendent	SU	1
Captain of Police	SU	51
Chief	SU	4
Commander	SU	24
Commander Of General Support	SU	1
Deputy Chief	SU	12
Deputy Superintendent	SU	1
Detective	SU	1

Detention Aide	SU	1
Director Of Human Resources	SU	1
District Watch Commander	SU	2
Evidence Tech	SU	2
Explosives Tech I	SU	8
Explosives Tech III	SU	1
F/A Id Tech I	SU	2
First Deputy Superintendent	SU	1
Gang Crimes	SU	12
Lieutenant of Police	SU	131
Police Administrative Clerk	SU	1
Police Agent	SU	11
Police Cadet	SU	1
Police Communications Operator I	SU	2
Police Dispatcher Aide	SU	1
Police Forensic Investigator I	SU	12
Police Lab Tech II	SU	1
Police Officer	SU	3221
Police Officer as Detective	SU	471
Police Officer Assigned Canine Handler	SU	8
Police Officer Assigned Evidence Technician	SU	32
Police Officer Assigned Latent Fingerprint Examiner	SU	7
Police Officer Assigned Security Specialist	SU	5
Police Officer Assigned Supervisor Latent Fingerprint Examiner	SU	2
Police Officer Assigned Traffic Specialist	SU	6
Police Officer Assign Youth Off	SU	21
Police Officer / Explosives Detective Canine Handler	SU	15
Police Officer / Field Training Officer	SU	51
Police Officer Legal Officer I	SU	1
Police Officer Legal Officer II	SU	1
Police Officer / Marine Officer	SU	6
Police Officer / Mounted Patrol Officer	SU	40
Police Officer (Per Arbitration Award)	SU	7
Police Technician	SU	2
Program Aide	SU	2
Sergeant of Police	SU	533
Superintendent of Police	SU	1
Superintendent's Chief Of Staff	SU	1
Unknown	SU	11

**4. Were the promotions, ranks or awards given to police officers affected by the sustainment (or not) of the complaints against them?**

We ask this question to find out how many police officers were given any awards after the sustainment or unsustainment of the complaints against them. Execution of this query gives us a table of 499 rows where each row consists of police officer id, name of the award received and the date.