COMP SCI 396, 496: Data Science Seminar (Fall 2019).

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## Checkpoint #1

## **Context for this checkpoint:**

Our group attempts to investigate how socio-demographic features such as race and ethnicity could play a role in the **outcomes** of police misconduct investigations, rather than focusing on the **occurrences** of such misconducts.

Our project attempts to investigate the question: "When a case of police misconduct victimizes groups that are historically marginalized, how unfavorable is its investigation?" We will look at different hypothetical effects such as: (1) "Is an allegation made by a victim of color less likely of being sustained?"; (2) "Do the durations of misconduct investigations vary across victim races?"; (3) "Do the disciplinary actions differ?"; and (4) "Are victims of color less likely to receive compensation from the state?" to test for the presence of significant racial disparities in the outcomes of investigations involving people of color.

This first checkpoint provides us with basic evidence on each of those dimensions for the entire population, i.e., without adding specific conditions such as race. These measurements will be used as baselines in future analyses — in the proceeding checkpoints — where we will also be controlling for at least one confounder: the allegation severity.

Question #1: What's the percentage of allegations that are sustained?

Query:

SELECT 100 \* AVG(CASE WHEN final\_finding = 'SU' THEN 1 ELSE 0 END) AS percent\_sustained FROM data\_officerallegation;

Result:

 Analysis of results: **8.8% of allegations made against cops are sustained complaints.** This means the complaint resulted in an investigation and the allegation is supported by sufficient factual evidence of a violation of policy. Regarding our overarching theme, this helps to establish our first baseline.

Question #2: What's the average investigation time measured from its start to the first decision?

Query:

SELECT AVG(end\_date - start\_date) FROM data\_officerallegation;

Result:

avg

267.0801434615893164

Analysis of results: The average investigation time of allegations from the initial complaint date to the end of the investigation date is 267 days, 8.7 months. Once the complaint has been completed it will be reviewed by a team to ensure accuracy and consistency through an investigation which may include interviews of witnesses and officers, a review of police department records, inspection of medical records and photographs, and legal analysis. Just because an allegation is made does not mean the complaint will be sustained. The majority of the time the officer is still either working on duty or being paid their normal salary during this investigation. Regarding our overarching theme, this helps to establish our second baseline.

Question #3: What's the most common type of disciplinary action?

Query:

SELECT final\_outcome, COUNT(\*) AS freq FROM data\_officerallegation WHERE final\_outcome != 'No Action Taken' GROUP BY data\_officerallegation.final\_outcome ORDER BY freq DESC LIMIT 3;

## Result:

final_outcome	1	freq
	+-	
Unknown	ı	8446
Reprimand	- 1	5280
1 Day Suspension	ı	4222

Analysis of results: After the investigation and the complaint is sustained the officer is given some type of disciplinary action. We initially planned for retrieving the mode, but opted for a short list after discovering that "Unknown" is the mode. The top 3 most common types of disciplinary actions are "Unknown", "Reprimanded", and "1-Day Suspension", which indicates a scale of gradual intensity that will be further investigated in Checkpoint #2. Regarding our overarching theme, this helps to establish our third baseline.

## Question #4: What's the average compensation amount measured from settlements?

Analysis of results: **This average amount of payments for settlements is \$195,054.33.** This number is low compared to the total amount of settlements, \$234,455,306.00, found using the database, because most settlements are in the thousands, rather than the millions and these

settlements are often the only form of acknowledgment victims will receive. These payments for police misconduct settlements come from the Chicago taxpayers. Regarding our overarching theme, this helps to establish **our fourth and final baseline.**