

FINAL PROJECT
GENDER RATIO
WOMEN : MEN
DISPARITIES IN
INCARCERATION RATES
IN AMERICA

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Security 315: Big Data and National Security

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RESEARCH TOPIC

- My research topic is: [Analyzing Gender Disparities in Mass Incarceration Rates](#)
- My topic also will discuss gender inequalities faced by women in prison systems:
 - NPR: <https://www.npr.org/2018/10/15/647874342/in-prison-discipline-comes-down-hardest-on-women>
 - APA: <https://www.apa.org/monitor/2009/10/recidivism#:~:text=In%20the%20last%2010%20years,63%20percent%20of%20men%2C%20respectively>
- By Analyzing gender disparities in mass incarceration rates, this project also will explore:
 - How many women are held in prisons, jails, and other correctional facilities in the United States? And why are they there?
 - How is their experience different from men's?
 - What are the disproportionalities in male and female prison systems?
 - Where is the population density of incarcerated males and females?

RESEARCH QUESTIONS

I. Which gender has the highest incarceration rates?

II. Which states have higher female incarceration?

III. Which states have higher male incarceration?

IV. What is the total population of male and females that are incarcerated?

V. What are the trends in incarceration?

VI. Which ethnicities have higher incarceration rates between the genders?





WHY I CHOSE THIS TOPIC

- I chose to study this research topic to become more knowledgeable on gender disparities in the criminal justice system.
- I also want to study the growing female prison population rates because there is more data focused on male incarceration statistics compared to females.
- Additionally, it is important to study the ethnic background of incarcerated women and men as well as the states where the prison population is highest.

DATABASES

Prison Policy Initiative

- [Prison Policy Initiative](#)
- [Prison Policy Initiative Gender and Race Breakdown](#)

Bureau of Justice Statistics and Vera

- [Bureau of Justice Statistics](#)
- [Vera Incarceration Trends](#)

IMPORTANCE OF TOPIC TO BIG DATA AND NATIONAL SECURITY

- The study of prison population and gender disparities in mass incarceration are important to study, especially for national security.
- Incarceration rates in the United States have dramatically increased and it is necessary to understand the possible causes and consequences of higher rates.
- In addition, the gender breakdown as well as the ethnic backgrounds of these populations are important to analyze.
- In Big Data and National Security, this is relevant because prison populations play a huge role in the justice system and in crime prevention.
- Studying this information, with the use of databases and Tableau will help to better visualize the data as a whole.

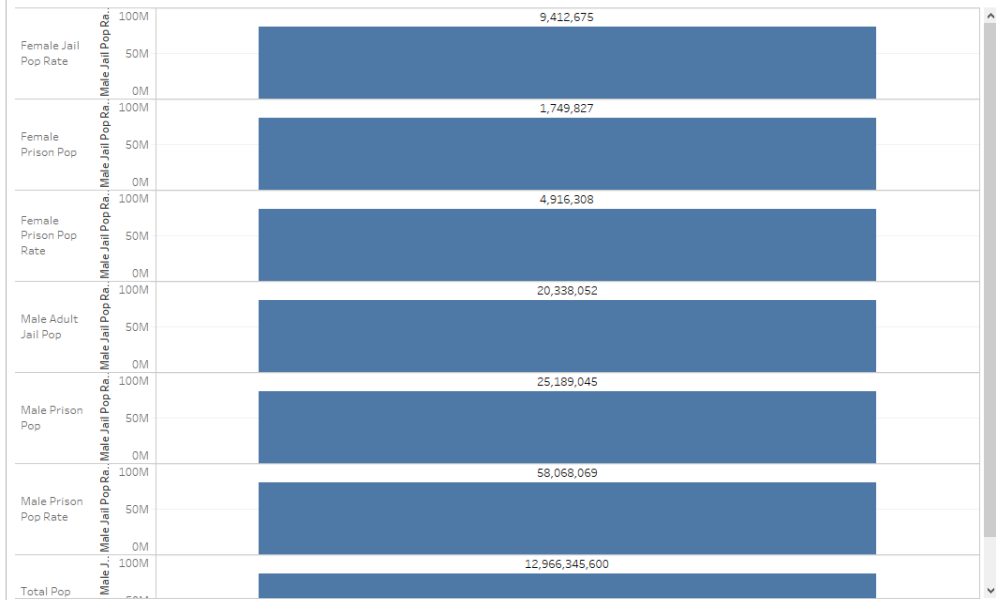
BACKGROUND INFORMATION

- Incarceration rates have quadrupled since the 1970's.
- Mass incarceration is higher than its ever been historically, in the United States.
- The criminal justice system has continuously increased incarceration rates over time.
- There is a correlation between race ethnicity and crime/prison rates.
- Historically, female incarceration rates are at a record-high increase.

TABLEAU VISUALS

Question 1.

1. Which gender has the highest incarceration rates?



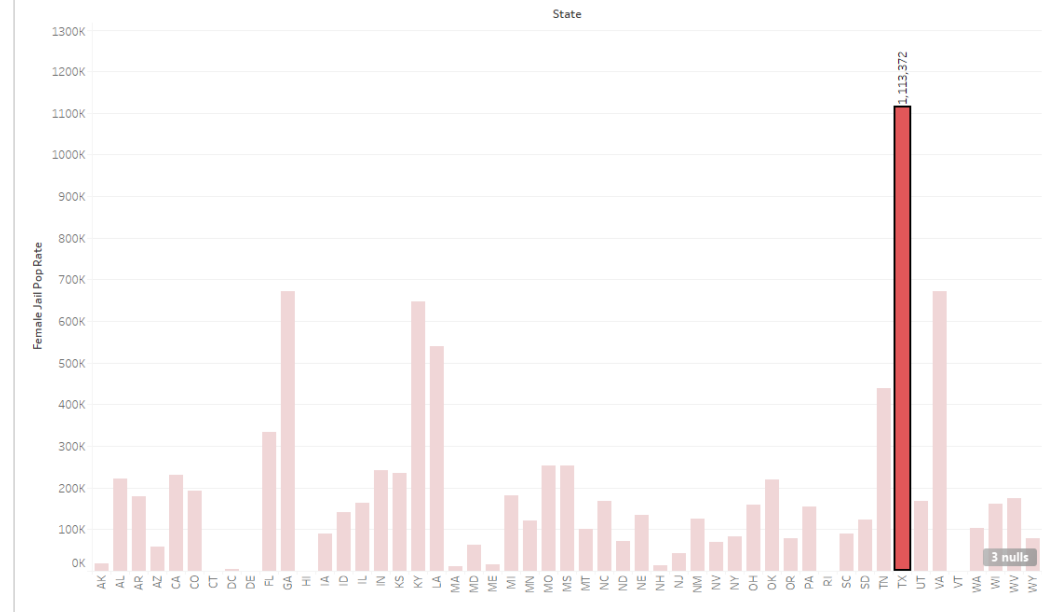
Question 1.

Question 5.

Question 6.

Question 2.

II. Which states have higher female incarceration?



Question 1.

Question 5.

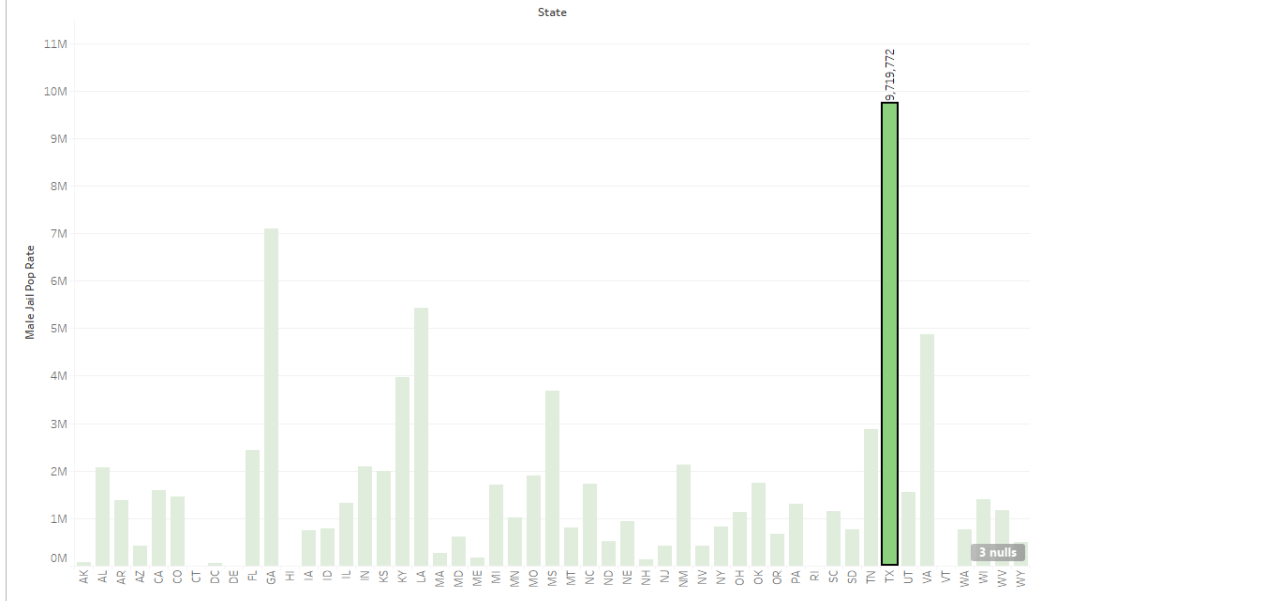
Question 6.

Question 2.

TABLEAU VISUALS

Question 3.

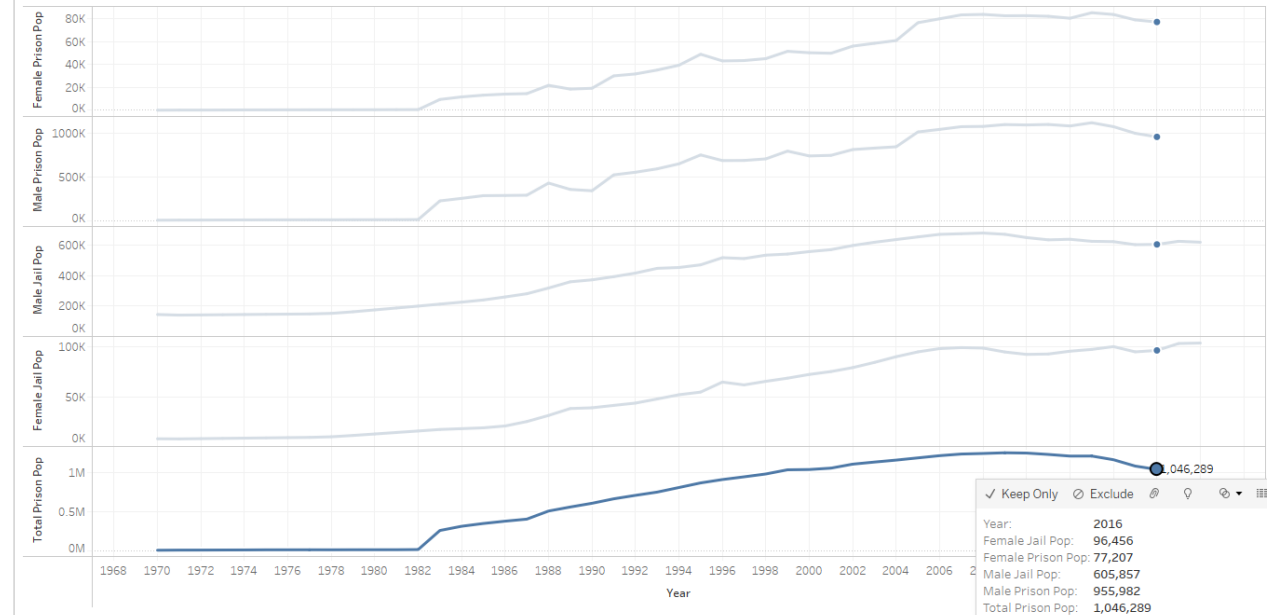
III. Which states have higher male incarceration?



Question 1. Question 5. Question 6. Question 2. **Question 3.**

Question 4.

IV. What is the total population of male and females that are incarcerated?



Question 1. **Question 4.** Question 6. Question 2. Question 3.

TABLEAU VISUALS

Question 5.

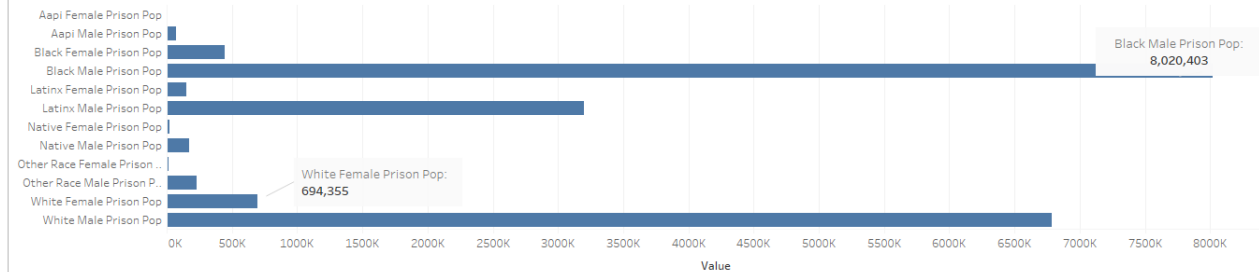
V. What are the trends in incarceration?

Urbanicity	Total Pop	Total Prison Pop
Null	71,868	
rural	2,101,605,201	4,297,780
small/mid	3,847,624,014	8,947,649
suburban	3,003,454,276	5,199,094
urban	4,013,590,241	12,771,981

Question 1. Question 4. Question 6. Question 2. Question 3. Question 5.

Question 6.

VI. Which ethnicities have higher incarceration rates between the genders?



Question 1. Question 4. Question 6. Question 2. Question 3.

CAUSE/EFFECT AND CORRELATION

- By analyzing the Male & Female incarceration rates on Tableau, there are several correlations to notice.
 - 1. There is a correlation between a location's urbanicity and an increased prison population.
 - 2. There is a correlation between Southern states and higher rates of incarceration.
 - 3. There is a correlation between ethnicity and higher prison populations (Black males and White females have higher rates of incarceration based on the data).

It is important to note that correlation does not equal causation. The difference between cause and effect vs. correlation is as follows: cause and effect are defined as “a relationship between two phenomena in which one phenomenon is the reason behind the other” and correlation is defined as “a statistical measure that expresses the extent to which two variables are linearly related”. In these examples, we cannot not assume that living in an urban area, Southern state or being a Black male or White Female are the reasons for imprisonment or incarceration rates being high. These are not cause and effect relationship but rather correlations in the datasets.

DATA INTERPRETATION/FUTURE TRENDS

How did the data guide my research?

- This dataset from the Vera, Bureau of Justice Statistics and Prison Policy Initiative provided key metrics in gender, race, age, location and jail/prison population breakdowns which helped guide my research and developing my questions to analyze.
- When interpreting the data, we can see that:
 - Male gender has higher incarceration rates than female
 - Texas has highest female incarceration rates (as of 2016)
 - Texas also has highest male incarceration rates (as of 2016)
 - Urbanicity of locations is a factor in higher prison populations
 - Total prison population is 1,046,289 (as of 2016)

In terms of future trends in incarceration, we can predict that there will continue to be a steady increase in prison populations. We can also predict that generally, the data will not deviate too much except for major events such as the Covid-19 pandemic, where prisons actually saw slight population decreases.