Exploring Crime Data in Maryland City by City

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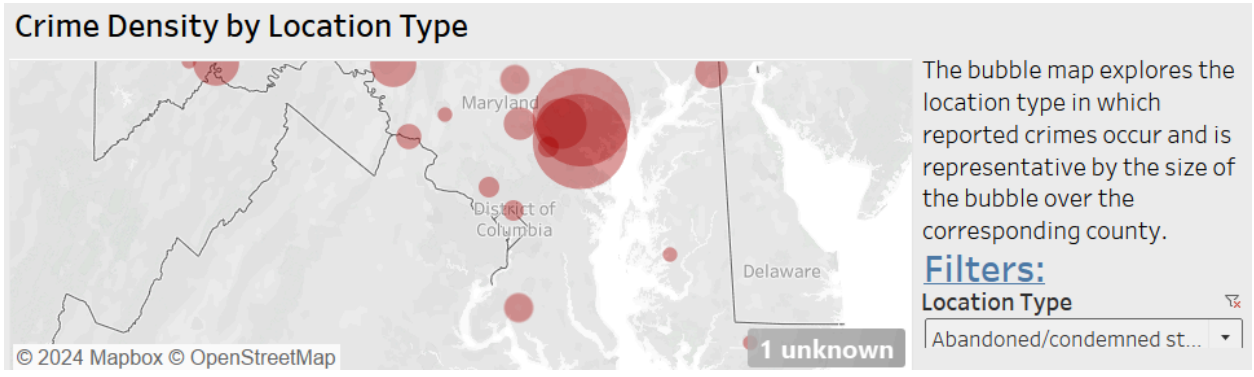
What is NIBRS and Why This Dataset?

The National Incident-Based Reporting System is a standardized reporting system within the United States managed by the FBI for all crime response agencies. Previously. The SRS for self-reported crime data was utilized alongside NIBRS and was recently replaced permanently with the sole focus of NIBRS for more data quality and reliability. Learning this was intriguing as I had learned about both systems in one of my favorite Gen Ed classes, CCJS100 Introduction to Criminal Justice. I wanted to explore it further and see the data collected and how it was documented for such a large-scale database. Discussion of NIBRS was a crucial portion of the class so working through the data to plan through my Tableau sheets made me reflect on the magnitude of importance of the topics discussed in my class.

Intended Audience:

My Tableau Story is geared toward the general population of Maryland who want to explore how different cities in Maryland differ in crime trends by playing with demographical and situational filters. The goal of my graphs was to allow my audience to explore the data trends with their questions by allowing them to explore trends for all cities and demographics or narrowing them down in any combination.

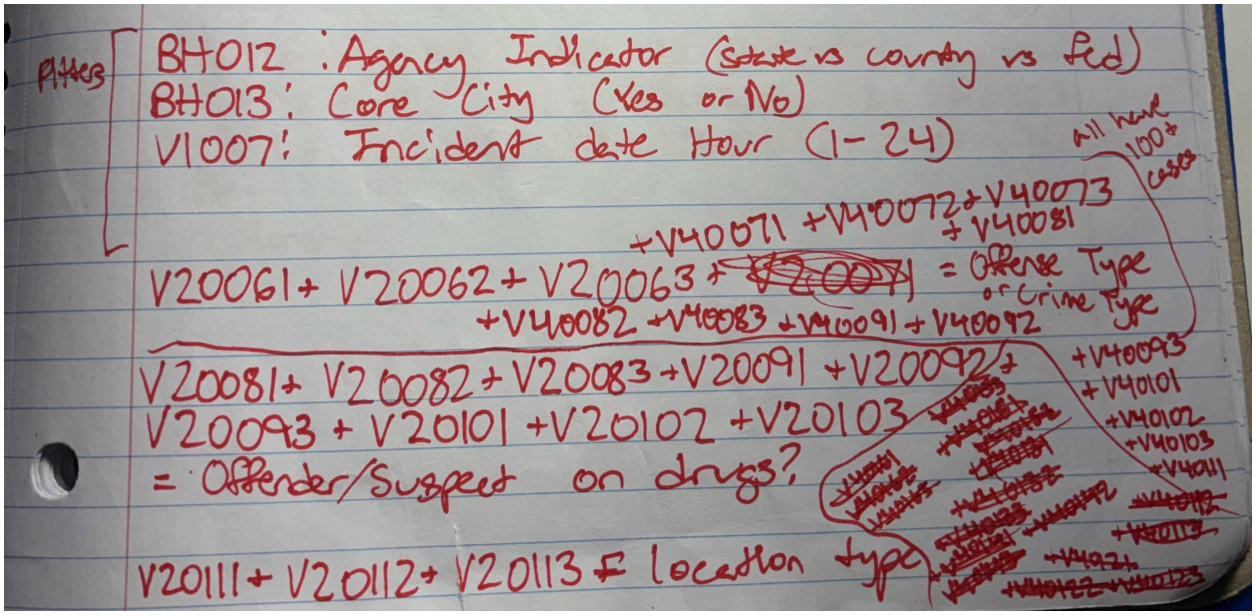
An example of my favorite visualization about the frequency of crime in different location classifications is below:



Successes/Strengths:

My main struggle was cutting down the data and figuring out which variables to keep. I misinterpreted the meaning of some of the data columns on the first attempt and removed the wrong data upon completing my first draft of Analysis 1. When I realized this, I had to restart and wrote down each row that was helpful over pages of my notebook in a way that resembled chicken scratch. An example of this is shown below. Tableau forced me to find and note issues

with the data I overlooked before which I appreciated, but in the moment it was frustrating to have to restart every time.



Analysis 1:

The main objective of my story tab "Overall Trends" was to showcase the trends in Maryland as a whole, and having cities as a filter but still having the data not rely on demographics. Here are my favorite parts/findings of each graph:

- *Density Reports By City By Color*
    - It was surprising to see Rockville be one of the few more prominent red cities.
    - Cities at the bottom of the graph had higher incidents than I expected
    - If I could redo my dataset I would compare the reports to the population of each city to standardize my comparison
- *Incident Occurance By Time of Day*
    - In some areas with higher reports like Towson or Baltimore, the crime trends midday were higher than at dark hours
- *Crime Desnity By Location Type*
    - The trend patterns for most locations stayed the same, but try clicking on "Camp/campground" and see how it changes!

Analysis 2:

The "Trends by Demographic" tab explored exactly what is labeled and focused more on the impact of race and gender in the frequency of crime. Here are my favorite parts/findings of each graph:

- *Victim-Offender Relationships for 1 on 1 Crimes*

    - Overall, the offender is more likely to be an acquaintance of the victim (excluding family or significant others) than to be a stranger.
- *Breakdown of Victim Sex By Race*
    - Overall in Maryland, white victims are almost half male and half female.
- *Gang Activity For Reports By Race*
    - Exploring how trends differ with selecting different races for victims and offenders is very interesting.

Next Steps:
Exploring the dynamics of victim and offender relationships based on demographical situations would be an interesting topic to break down further. Comparing these trends with similar research would be very interesting and would give me more practice in analysis while allowing me to explore topics like sociology which I enjoy.